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1909

MANUAL

OF THE

WINONA NORMAL ELEMENTARY SCHOOL

COURSE OF
STUDY

WINONA · MINNESOTA

MANUAL

OF THE

WINONA NORMAL

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ELEMENTARY
SCHOOL

COURSE OF STUDY

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WINONA, MINNESOTA

St. Paul

1909

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PREFACE

This is a revision of the manuals published in 1903 and 1907. Others will follow from time to time as new matters and changes worthy of note shall arise. We therefore request the hearty co-operation of school teachers and superintendents in making the series of practical value for the purposes intended. We invite suggestions, criticisms and other aid that will help the school to be of greater assistance to the teachers of the state.

The manual has been prepared for two purposes. Our student teachers require a hand-book to aid them in becoming intelligently acquainted with a graded school course of study. In the second place our graduates and other teachers and superintendents thruout the state may be interested to know what position the Winona normal school takes in regard to points, dabatable or otherwise, in the course of study.

In assisting to modernize the course of study for elementary schools we realize that a normal school must not go too far from the commonly accepted course of study lest student teachers be handicapped by being thrown into situations too strange, when, after graduation, they begin their independent teaching. Consequently this course of study is not so much an expression of what we might like to do as it is a statement of what seems practicable in the schools of Minnesota. That is to say, we try to have in our elementary school for the observation of our student teachers, not a course that is theoretically ideal (if there could be such), but one that is usable in any graded school in the state.

Variations in literary style which may be remarked by one who reads this manual as a unit, as well as implicit differences of opinion upon psychological and pedagogical questions, point to the fact that this course of study is the joint product (after prolonged discussions) of members of the faculty most concerned with the various subjects.

WHAT THE SCHOOL STANDS FOR

There are few data of scientific accuracy back to which we may go for principles of direction in the construction of a course of study. On the one hand, there is no standard by which to judge as to what knowledge is of most worth. Some affirm that all branches of knowledge have equal value (for discipline, at least), others that each subject has quite distinct values, and still others that their values depend upon the point of view and methods of presentation. We *know*, (in the accurate use of the term), neither what subjects to put into a course of study, at what point to put them in, nor how to apportion the time to be given to each. Nevertheless, in the presence of such empirical conditions we are confronted by a practical situation which demands that the children of the nation be taught something, be prepared, whether well or poorly, for active, practical life. We, therefore, are compelled to construct some sort of curriculum.

In the absence of scientifically accurate basal facts, we are compelled to rely pretty largely upon the general principles which lie behind our efforts, much as the traveler who does not know what he will do each day, falls back upon the plan of keeping in view his final goal and doing his best to make each day's conditions assist in the accomplishment of his journey. So in education — aims, values, and purposes occupy a very prominent place while the subjects and division of subjects in a course of study occupy one comparatively less important, since in the absence of scientific backing they may be blown about by every wind of doctrine.

And, indeed, the meanings, values, and purposes of education are themselves somewhat uncertain. They change from generation to generation and vary with the locality of the school and the personality of individuals. Yet in each generation and in each locality a group of tendencies and purposes form themselves and become a direct influence in the school, both upon the objective goal and in the formation of a course of study. These tendencies are hard to describe in full and one can hope to do little more than pick out some of those that are emphasized most strongly.

The aim of our elementary school is to assist children to appreciate the values of life and to get control of them. (The training of student teachers is incidental in this connection.)

By *values of life* we mean those things which today are considered worth while, which people are proud to possess or to be connected with. To catalog them all would be impossible. To catalog the most important would also be impossible. All we can do is to state those which we believe to be the most important for us and for the state of Minnesota.

One of the chief values of life is a strong, vigorous, healthy physique. To further this, we have this year a well equipped gymnasium in which every pupil of the elementary school receives instruction and is allowed some free play under competent supervision. Physical examinations are conducted by an appointed school physician, assisted by the directress of physical education.

Another chief value of life is information. Being the method by virtue of which all control or growth of appreciation is possible, it is everywhere present in life and education. Because of this, it has received almost exclusive attention in education in generations past. In the process of time it grew to be no longer a means but an end of education. In recent years it has been a sign of so-called progressiveness to snatch from its head its ancient crown, but it is too useful, too all-pervasive to disappear, tho it continues no longer as monarch, but stands firm upon its virtue as an indispensable member of the family of experience.

Another chief value is a fine, warm, enthusiastic social consciousness, one that takes into account the value of friendship, of service, of reliance and dependence, one that alternately and simultaneously gives to and receives from society. The attention paid to this value is rapidly rising and greater and greater stress is likely to be laid upon it, at least temporarily, in the near future. We are not among the radicals in following this tendency, but we recognize its worth. We do not have our children work in groups to any great extent, altho we have such in manual training, when, for instance, several boys work together on an ice boat, or when the boys build the doll house and the girls furnish it, or when the more clever of the children are allowed to assist the others to a limited degree. We also make the social motive the main basis for our school discipline and utilize it in our reading and language. The children are taught in discipline to recognize the doctrine of non-interference with others and of helpfulness to others, including their classmates, the janitors and the teachers. In reading and

language we make it a central principle of method of instruction that both of these subjects are tools by which to express our ideals *to other people*. This value is again seen as one of the controlling principles in history. By this we mean that an important aim of history instruction is to make past situations so real that in imagination the children may in some degree actually live the lives and feel the problems of the people concerned.

Another chief value is a rich, sensitive, æsthetic nature. In this two factors operate — an æsthetic environment, and instructors in sympathy with the best art. This, we believe, is one of the strongly marked characteristics of our school. In music we have the best chorals and songs sung in chapel and in the regular singing period; we also have the *metrostyle* by which the pupils become acquainted with the works of the masters of music. In art we have been able to secure by purchase and gift reproductions of the works of the master painters and sculptors. In literature a wide selection is made from the many texts mentioned under that subject in this manual, so that the children will be able to spend their time upon only the best.

Other chief values of life are religion and morality, one of which we try to teach thru its particular manifestation, reverence, and the other of which we try to inculcate in the everyday procedure of life, by laying stress upon such virtues as cleanliness, self-control, obedience, and honesty, supplemented by certain more or less formal work in ethics.

By *appreciation* we mean both intellectual appreciation, with an eye to values, ability to get the perspective of things, and what we may, for want of a better term, call emotional appreciation. Intellectual appreciation of values is calculating, deliberate, cold; emotional appreciation is warm, joyous; intellectual appreciation steadies the emotional, and the emotional in return gives life and joy to the intellectual. The ways in which we try to get this in the school are intangible and difficult to state in words. For the most part it comes thru stress laid upon personality rather than upon subject-matter, upon the man rather than upon knowledge, upon the content of experience rather than upon forms, upon entering into experience, upon dramatization and upon making situations *real* by illustrations and devices.

By *control* of these values we mean that we lay emphasis upon

the ability of a child to secure, to obtain, to lay hold on them. It stands for efficiency. If the child has the capacity for æsthetic enjoyment he ought to be able to *get* this æsthetic enjoyment; if he wishes to be of social service he ought to know how to be able to be of social service; if he has a desire for a religious life he ought to have the skill to live a religious life. When he has a scheme of values he should be able to fulfil his heart's desire in connection with any of them.

It lays emphasis upon the discipline of the powers, upon efficient endeavor, upon fluency of expression, upon power to organize, upon accuracy and readiness, and upon good judgment and common sense. Mere knowledge, mere enjoyment, mere æsthetic appreciation must be supplemented by the ability to use them.

These tendencies may be illustrated in their practical working in the subject-matter of the course of study. They produce certain characteristics which have several manifestations in the school.

In the first place, there is a tendency to modernize the course of study because of the fact that we have an intellectual appreciation of the values of life. Values change and many things which were once of value are no longer so. Yet in spite of this they remain, and hence need to be lopped off. This modernization shows itself in arithmetic where we have eliminated from our course of study phases of work no longer socially serviceable. It is seen again in history when we lay less stress than formerly upon wars, and more upon government growth, less upon fiction, and more upon fact. In geography we are not discarding so much as adding to the subject-matter by bringing in descriptions of processes of growth and manufacture and a knowledge of relations between products and phenomena and physical condition.

A second manifestation of these tendencies is the endeavor to introduce subject-matter thru its function. Control is an aim of life and subject-matter is the means stored up for securing control, for solving problems, etc., and is best introduced when the need for it has arisen, when the problem it will help has come to the surface, or when the desire it fulfils is felt. This shows itself in various ways.

In drawing the children paint first and then as it is required technique is introduced. In reading the children read first and then as the need of symbol study is felt it is given. In arithmetic many processes, measures, denominate quantities, rules,

and devices are so introduced. Similarly, attention is paid to words in composition work because failure to spell correctly causes misunderstanding. And again in history one topic provides a clue for the introduction of a later one.

This branches easily into a method which, called by various names, is based upon the fact that subject-matter not only may be used as a tool of experience, but has been constructed by experience as it worked freely and naturally in its everyday activities. It, therefore, follows that much of the technique of experience in the school room may be constructed by experience without much conscious effort. Experience has learned the habit. For instance, in reading the children's desire to read what they know *to other people* makes them reasonably expressive readers without paying much attention to the technique. So in writing, the desire to write so that their friends may understand them, makes them fairly good writers without much attention to the matter in formal writing lessons. This is what may be defined as one phase of the thought method, of the experience method, of the natural method, or of the purposive method.

A third manifestation closely related to the fact that the function of subject-matter is to assist experience, is that of the attempt to parallel the subject-matter and the experience of the child. Since subject-matter is an aid, it cannot be presented in a form more complex and subtle than the experience of the child. When a child is at an age when he thinks in paragraphs, it is a serious mistake to have him try to distinguish fine shades in the meanings of words, and when he is unable to analyze, it is a mistake to expect explanations of problems in arithmetic. On the other hand, when he is able to do *difficult* work he should not be hampered with easy work. A strict parallel should be preserved.

To secure this parallel we have for the most part in practical procedure to make the subject-matter in the grades simpler, to move the subject-matter up the grades and hold the children to greater skill in handling it. For instance, in arithmetic we do not require *formal* analysis below the sixth grade, because it tends to result in the mere mechanical memorizing of the form given. In manual training we have work such as pottery in the lower grades which does not require fineness of co-ordination, and little is done in any grade in hard wood which requires great fineness. In language

we have little technique, except incidentally, below the sixth grade. In the sixth grade we take the paragraph because the children are just then beginning to be able to pick out big thoughts; in the seventh grade sentences, and in the eighth grade the finer distinctions between words as shown chiefly in the more complex forms of grammar.

In addition to this, we utilize the newer sort of subject-matter sometimes appearing under the name of history, sometimes under that of manual training, and again as geography, known generally and roughly as studies in primitive life. This subject-matter is used by us almost entirely from the standpoint of providing simple situations in which the fundamental problems of modern life, such as food, shelter, family, etc., are solved in simple ways rather than from that of attempting to have the children live the lives of these people and be savages with them. We find these problems and solutions in simplified form in the stories of the Tree Dwellers and Cave Men, of Ab, of Robinson Crusoe, in pioneer life, in The Seven Little Sisters, and in such manual training work as the evolution of milling and of the plow, all of which are made the basis of construction and sand-table work.

We, then, stand for the following:

1. A simplified course of study with rigid standards of excellence.
2. No subject-matter without some need for it.
3. The ability to get control of what is worth while.
4. The things worth while are social, intellectual, physical, æsthetic and moral enjoyment and efficiency.
5. No more attention to technique than is necessary for efficient control.

PART I

KINDERGARTEN

INTRODUCTION

To help little children to adjust themselves to the life about them and to prepare them for the more formal school life, the kindergarten stands as the natural link between the home and the school. It partakes of the nature of both, for it preserves and utilizes the spirit, the relations, and the experiences of home life, and brings to the children added power to organize time, and to systemize play and work. This develops in the children habits of thought and action, which prepare them for the work of the school.

The kindergarten is a little social community in which children of similar ages under guardianship meet on an equal footing, share with one another various experiences, play and labor individually for personal advantage, or co-operatively for the good of the group, thereby developing those traits of character which lay the basis for right citizenship and true selfhood.

The whole child is taken into account in the kindergarten, hence ample opportunity for exercise and out-door life is provided thru games, rhythmic plays, walks, and excursions. To promote mental development, stories, songs and morning talks are utilized — for the pleasure which they give, for stimulation to the imagination, for imparting information, and for implanting ideals; for giving correct ideas of existing relations, and incidentally for their value as language lessons. The so-called gifts and occupations of the kindergarten are included in this category and are employed chiefly to develop in the children the power to *do* things, rather than as a means of imparting knowledge. Special attention is given to the development of those habits of conduct which are necessary to the happiness and well-being of the individual and of the group. The children are led to be helpful, to observe the rights of others, and to be courteous and kind. The retributive method of discipline is employed; thus the children are led to distinguish between the right and the wrong by reaping the natural consequences of right or wrong acts.

The complete course covers a period of two years, the children being admitted at four years of age. The children meet in one group for the morning and closing circles and for the games and rhythmic plays; for the stories, morning-talks, and table work (gift and occupation work) they are graded into three divisions according to their ages and experience, and the work is adapted to their various stages of development.

The enlarged Froebelian gifts are used thruout the course, and the directed work which is given is intended to suggest to the children the possibilities of the material, and thus to stimulate the children to do original work. Opportunity for free play — *viz*: original work — with the gifts is a conspicuous part of our daily program.

In our occupation work we lean toward the freer and more expressive forms of work — free and illustrative drawing, free cutting, clay modeling, etc. The directed work with the occupations, as with the gifts, is to develop in the children the power to handle materials in such a way as will lead to independent and productive results.

In selecting stories to be used in the kindergarten, we aim to present those that make a distinct appeal to children and, at the same time, have some literary value. Very little formal marching is given. In its place we have rhythmical plays of various kinds, such as forms of walking, running, skipping, imitative movements, and simple ring games.

THE PROGRAM

In preparing a program for the kindergarten, the teacher must not only consider the nature and needs of the individuals to be trained, the experiences which they have had prior to their kindergarten days, the environment in which they live, and the influences which have surrounded them, but must also be able to weigh these various factors and determine what is of worth in this total of experience. To do this, she must study her group of children and their activities in relation to the development of collective humanity, for from the study of the development of mankind she gets her standard of values. The immediate experiences of the children are her points of departure for the work of the year. From these

she is to lead her children into broader and richer experience by interpreting for them some of the familiar phenomena of life about them, and by introducing them to more distant phases of life which more or less directly affect their own little lives. It stands to reason that a fixed program will not be fitted to the needs of all classes of children. The following program was prepared for a class of children having more or less varied experiences and living in our city, which combines in an unusual degree the advantages of city life and the environment of country life. The children know at first hand a river, a lake, bluffs, meadows, etc., and the squirrel, which plays an important part in the program, is a familiar figure in the streets of Winona.

FALL TERM

1. **The Home Experiences of the Children** — The members of the family; the children's pets, playthings and plays; the father's and the mother's work; the kindergarten home and the kindergarten doll.

Analogy in Nature — Families in the world of nature—squirrels, birds, etc.— their work and plays.

2. **Preparation for Winter** — Mother's work in the home; father's contribution; the care of the yard; storing of fruits, vegetables, and fuel.

Analogy in Nature — The squirrel's preparation; storing food for winter; preparing of the home.

Preparation in the World of Nature — The flowers, seeds — only two or three familiar varieties; the caterpillar; the birds; the trees; changes in weather conditions.

A Helper — The farmer and his harvest; our dependence upon him; visit shop to see fall vegetables; gathering of vegetables from the kindergarten garden.

3. **Thanksgiving**, a culmination of the fall thought — General causes for thankfulness, of the children, of nature's family; specific things for which we are thankful — food, bread and butter; Thanksgiving day.

Note — In taking up the subject of bread, the finished product is traced to its source; later the children grind the wheat seeds into flour which they sift and then send to the Domestic Science Depart-

ment where it is made into bread and returned to the kindergarten. Butter is made by the children in the kindergarten, an ordinary cream whip being used as a churn.

Excursions — Excursions each week to view changes being wrought by nature and to observe squirrels, birds, etc.; work in kindergarten garden.

Stories — Thumbling, (*15); The Three Bears, (4); The Frog Prince, (1); Dora and the Light House, (15); The Squirrel Family, (adapted, 6); The Crane's Express, (6); The Little Green Caterpillar, (adapted, 13); Which Was Happier, (Primary Education); The Big Red Apple, (3); Tommy Tucker's Bun, (14); The Little Red Hen, (4).

Songs — Greeting, (29); Hymn, (28); The Wandering Doll, (29); The Dolly I Love Best, (23); The Flowers' Lullabye, (30); Mr. Squirrel, (26); The Farmer, (28); Mr. Duck and Mr. Turkey, (26); Pat-a-Cake, (33); The Pigeon House, (28); Jack Frost, (31); America, Humpty-Dumpty, Wee Willie Winkie, Ba-Ba Black Sheep, (24).

Finger Plays — The Family, (29); The Caterpillar, The Little Boy's Walk, (22).

Rhythms — Simple hand movements, musical instruments, etc. walking, running, jumping, skipping; the home-work of mother; the farmer's work; swaying trees; flying birds.

Games — Ball games, rolling to children, rolling to center, batting ball; sense games, smell and taste; The Mystery Man, (38); Itiskit-Itaskit, (34); The Mulberry Bush, (34); Skip Tag; Let us Chase the Squirrel, (23); Sleep Fairy; Train Game, (27); The Pigeon House, (28); Turn, Said the Stream, (30); Going to Grandmother's, (28).

Table Work — Younger group: The large blocks (Hennessy's); the first gift — activity; three primary colors; directions round and round, and up and down; second gift — group work, families of forms; third gift — constructive plays; the circular tablets; seed work. Free and directed work in sand bed; black-board drawing, clay modeling, bead stringing, pasting, cutting — for control of scissors; over and over sewing — without needles; peg-boards; stringing of seeds; making scrap books.

*For significance of numbers see book list.

Note. With the younger group more emphasis is placed on the occupation work than on the gift work.

Older Group: First gift — brief review of color and emphasis on directions; the fourth and fifth gifts — constructive work; square and right angled tablets; sticks, rings and seeds; large blocks. Group work, whole class. Free and illustrative work in sand bed; clay modeling; free and illustrative drawing, crayons; cutting, free and to line; card-board modeling, slit-work and simplest upright forms; folding—making of mounting books for children's work; sewing, over and over — making of folios for use in kindergarten; weaving, co-operative and individual; parquetry.

WINTER TERM

1. **Service to Others** — Santa Claus as the personification of the spirit of giving; children as givers; the story of the first Christmas. The entire month of December is devoted to the Christmas thought.
2. **The New Year and What it Brings** — Seasons, birthdays, festivals, snow, rain, etc. Idea of time-order developed.
3. **How We are Protected From the Elements** — Warm clothing — tracing to its source some child's garment; our houses, leading to the thought of a helper, the carpenter; the heating of our homes and the school, leading to the thought of the work of the miners.
4. **The Spirit of Knighthood** — A brave helper of today — the fireman; helpers of old — the knights; a knight of fiction — St. Valentine; a knight of history — George Washington; children as embodying knightly characteristics.

Excursions — Visit toy-shop.

Stories — Nannie Golden's Christmas Tree, (Ms.); The Two Stockings; Piccola, (12); St. Luke's version of the Nativity; The Fairy's New Year's Gift, (6); The Three Little Pigs, (4); The Little Heroine of Poverty Flat, (16); King Midas, (5); The Search for a Good Child, (17); The Boy, Cedric, (adapted, 11); The Boyhood of George Washington, (adapted, 12); Dora and the Light House, (15); Story of St. Valentine; 'Twas the Night Before Christmas.

Songs — Santa Claus, (27); Christmas Hymn, (30); The Wonderful Tree, (28); Merry Christmas, (31); The New and the Old Year, (28); Merry Snowflakes, (30); The Carpenter, (29); The Miner, (31); Ba, Ba, Black Sheep, (24); The Knights, (29); Our Flag, (31); Three Cheers for the Red, White and Blue.

Finger Plays — The Lambkins, (22).

Rhythms — The rocking horse; toys; carpenter's work; miner's work; fancy march — wheel movement; tick-tack; military march; feats of skill — running, jumping, throwing spear, hurdling.

Games — Quiet game; Neighbor, Neighbor Over the Way; The Toy Man, (23); The Sand-Man, (23); Santa Claus, (22); Snow-ball; Snow-Man, (26); Skating Game, (37); The Cooper, (28); The Miner; Little Travellers, (23); The Five Knights, (29); The Soldier Boy, (34); King of France, (34); The Firemen.

Table Work — **Younger Group:** Large blocks. First gift — color and direction. Second gift — group plays and whirling. Third and fourth gifts — constructive plays; square tablets; whole rings. Work in sand-bed, black-board drawing, free drawing with crayons, peg-boards. Cutting, pasting; sewing — over and over; folding — very simple folds. Christmas gifts based on occupation work.

Older Group: Large blocks. Second gift — mechanical inventions. Fourth, fifth and sixth gifts — constructive work; right-angle and equilateral triangular tablets; sticks and rings; combinations of gifts for illustrative work. Work in sand-bed, free and illustrative drawing, free cutting; card-board modeling — dolls' furniture (children furnish the doll's house, thruout); weaving — combinations of weaving and sewing, thus making useful objects; poster-work; Christmas gifts employing the occupations with which the children are familiar; making of badges, pennants, shields, etc., for holidays.

SPRING TERM

1. **A Helper, The Blacksmith.** Some heroes in the animal world. Connects with the work of the winter term.
2. **Heralds of Spring.** — Nature's heralds — The wind, the sun, the rain, pussywillows, the robin; children's spring plays; the wheel and its use.

3. **Nature's Awakening and What it Brings** — The Easter thought; the farmer's spring work; animal life on the farm; the birds — four familiar and distinctive birds are observed as to their homes and life; the trees — a few familiar trees studied; insects; the bees or ants; the kindergarten garden, planning and planting the garden.

4. The last two weeks are given to a review of the salient features of the year's work.

Note.— One day is devoted to the celebration of Froebel's birthday.

Excursions — Each week excursions are made to note signs of nature's awakening, for the observation of birds, trees, etc.

Stories — The Little Grey Pony, (9); The Story of Bruce, (18); The Mother Stork; Raggylug, (4); The Little Half Chick, (3); The Disobedient Weather-Vane, (10); The Wind and the Sun, (6); The Little Green Worm, (13); The Sleeping Beauty, (1); The Sheep and the Pig, (3); The Little Red Hen, (3); The Lost Chicken, (6); The Disobedient Pine Tree, The Bird's Nest, Kindergarten Review, April 1909; The Myth of the Woodpecker, (3); The Nest of Many Colors, (6).

Songs — The Blacksmith, (28); Good Morning Glorious Sun, (31); The Wind, (29); Pussy-Willow, (31); Pit-A-Pat, (31); Robin Redbreast, (31); The Song of the Rain, (28); Easter Hymn, (30); The Bluebird, (26); The Barnyard Song, (29); The Song of the Bee, (28).

Finger Plays — How the Corn Grew; the Caterpillar; The Counting Lesson (22).

Rhythms — Hopping and flying birds; flying kites; the frogs; see-saw; the May-pole.

Games — Two Little Windows, (38); Close Hidden in my Hand it Lies, (28); The Musician; The Visiting Game, (23); The Cuckoo, (29); Oats, Peas, Beans, and Barley Grow, (34); The Bird's Nest (29); The Busy Bee, (27); Sense games.

Table Work — **Younger Group:** First gift — directions and colors. Second gift — group work. Third and Fourth gifts — constructive work; tablets, rings — wholes and halves, seeds, large blocks for group work. Occupations for winter term continued and increased in difficulty.

Older Group: The fifth and sixth gifts — individual and group

work. The children now having good control of material are allowed to work in small groups of two or three. All the tablets, sticks, and rings; combination of different gifts for constructive purposes and for illustrative work — individual and group work. Directed work in the sand-bed; card-board modeling, advanced forms; clay modeling, free and illustrative; drawing — crayons; weaving; poster-work; making kites, etc.

Note — A few good poems are read to the children during the year, and the children learn a few short memory gems.

BOOK LIST

Stories

1. Grimm's Fairy Tales.
2. The Children's Book, Scudder.
3. For the Children's Hour, Bailey & Lewis.
4. How to Tell Stories to Children, Bryant.
5. The Wonder Book, Hawthorne.
6. In the Child's World, Poulsson.
7. Parables From Nature, Gatty.
8. Stories to Tell to Children, Bryant.
9. Mother Stories, Lindsay.
10. Two Children of the Foothills, Harrison.
11. In Storyland, Harrison.
12. The Story Hour, Wiggin.
13. Cat-Tails and Other Tales, Howliston.
14. Mother Goose Village, Bingham.
15. Boston Collection.
16. The Little Heroine of Poverty Flat.
17. More Mother Stories, Lindsay.
18. Stories of Brave Dogs from the St. Nicholas.

Poems

19. The Child's Garden of Verse, Stevenson.
20. Poems of Childhood, Fields.
21. The Posy Ring, Wiggin and Smith.

Songs and Finger Plays

22. Finger Plays, Poulsson.
23. Holiday Songs, Poulsson.

24. Mother Goose Songs, Crowninshield.
25. More Mother Goose Songs, Crowninshield.
26. Small Songs for Small Singers, Neidlinger.
27. Song Echoes From Childland, Jenks & Rust.
28. Songs and Games for Little Ones, Walker and Jenks.
29. Songs and Music of Froebel's Mother Play, Blow.
30. Song Stories for the Kindergarten, Hill.
31. Songs of the Childworld, Gaynor.
32. The Child's Garden of Song — Tomlins.
33. Songs for Little Children, Smith.

Games and Rhythms

34. Children's Singing Games, Hofer
35. Instrumental Characteristic Rhythms, Parts I, II, Anderson.
36. Large Rhythmic Movements, Rogers.
37. Music for the Child World.
38. Timely Games and Songs for Kindergarten, Reed.

ARITHMETIC

I. INTRODUCTION

While the instruction in arithmetic in the grades is designed in part to afford a necessary basis for more advanced work, the chief aims are, **in general**, to furnish sufficient arithmetical knowledge for the ordinary occupations of life, and to promote habits of accuracy, logical reasoning, and independence of thought and judgment and to aid in the interpretation of all great aspects of human life. The **special** aim in the lower grades is to promote speed and accuracy, especially as regards the combinations of numbers usually memorized, and the ready use of necessary tables. In the lower grades we do not require *formal* analysis on the part of the child. He is allowed to state his conclusions in his own way, unhampered by the thought of the "process." He can be sure of many things which he cannot logically explain, nor express in technical terms. The premature requirement of accurately expressed definitions, niceties of expression, statements of general principles and logical analysis, is almost certain to lead to mere memory work and confused notions, thus causing an early distaste for the subject. It is needless to say that the teacher should present each new subject in a logical manner, being satisfied that the children follow her explanation and appreciate the reasons for the process. The forms of expression used by the teacher should be scientifically accurate and, to an extent, technical. Gradually the pupils will adopt these forms and, if habits of accuracy and rapidity in computation are established, they will approach the formal analysis of process in the seventh and eighth grades with such preparation as to allow them to master in one year that which, under the forcing process, they fail to master in six.

The majority of pupils who have completed the subject of arithmetic in the grades are inaccurate, uncertain, unable to do

sustained mental work, and woefully slow. The average pupil figures, but he does not see relations; he ciphers, but he does not think; he reads words with no comprehension of thought. The explanation of this state of affairs we firmly believe to be too much formal analysis, as well as the imposition of work adapted to higher grades upon children of immature minds. It is certainly most important that, in the presentation of a new subject, the teacher should lead the pupil to see the reason for each step, but, this assured, no formal explanation should be demanded from children below the seventh grade. Previous to this time, possibly in the sixth grade, should begin the transition from the more or less mechanical work of the lower classes to the thought work, application of principles, and logical analysis of the grammar grades. Up to this time we consider it of far greater importance that a child be able instantaneously and accurately to divide $\frac{2}{3}$ by $\frac{3}{4}$, than, in a parrot-like way, to go through a logical (?) demonstration of the process. For, with nine children out of ten, explanations are largely memorized. So with concrete problems. In too many of our schools, problems quite beyond the comprehension of the pupils have been forced upon them. When work of this nature is given to children unprepared for it, clear thinking is of necessity an impossibility. Hesitation and uncertainty become a fixed habit which might never have been formed had the pupil attacked his problem for the first time with a maturity capable of grasping it. The children, being absolutely unable to solve difficult problems, become so accustomed to expect aid from the teacher that this, too, becomes a fixed habit to such an extent that when the age is reached when independent thinking should be expected it is found necessary to develop every new subject in detail.

It is then our purpose to make the required work in arithmetic less difficult than the requirement in the corresponding grades of most of the public schools. To this end, first, the number work of our first school year is done incidentally rather than formally; second, recognizing the fact that strong mathematical development is to be obtained from the study of arithmetic far beyond the grasp of the eighth grade child, the completion of the subject is assigned to two terms in the third year of the course in the Normal Department, after the study of algebra and geometry has paved the way to a real understanding of the principles involved;

and third, for the better mastery of more important topics we attempt to save time through the elimination of unnecessary matter which formerly may have been valuable, but which we feel should be discarded because the old involved methods of solution have given place to newer and simpler methods, as in proportion and in the treatment of roots by the graphic method, or because, as business problems, they are obsolete, as in partnership, exchange, present worth, etc. It was not until the middle of the eighteenth century that the decimal fraction had any footing in the schools, although it was invented some one hundred fifty years prior to this time. The absence of the decimal fraction explains our inheritance of the greatest common divisor and least common multiple of large numbers, these being then needed for the solution of problems involving the enormous common fractions which are now so uncommon, hence, except for purposes of logical exercise in advanced work, so that pupils have a conscious method of procedure, we omit problems in greatest common divisor and least common multiple.

As number is essentially the result of measurement and comparison, the idea of comparison is emphasized thruout the whole course in arithmetic. In this connection stress is laid upon the true nature of the unit — not a “single thing or one,” but any quantity used as a basis of measurement or comparison. Comparisons are required to be made directly, not thru the medium of the **one**, as is so frequently the case. To illustrate, let us compare the two methods of solving the following problem:

If 4 yards of cloth cost \$5.00, find the cost of 8 yards.

First solution: Since 4 yards cost \$5.00, one yard costs one-fourth of \$5.00, or \$1.25. Then 8 yards cost \$1.25, or \$10.00.

Second solution: Since 4 yards cost \$5.00, 8 yards cost 2 \$5.00, or \$10.00.

In the second solution the work is shortened by making the given quantity the basis of comparison, instead of the intermediate one yard.

Thruout the work in comparison the difficult complex fractions should be avoided. Children may easily be drilled to make readily the necessary changes in the quantities given in order that they may be easily compared. If 2 yards is to be compared with $2\frac{1}{2}$ yards, think of each quantity as expressed in half-yards. It is

at once seen that the first is expressed by the number 4, the second by 5. So 3 yards compared with $4\frac{1}{3}$ yards is $\frac{9}{13}$, thinking of the **number** of third-yards in each case. Since, when the units are alike, the numbers only are compared, the numbers only should be mentioned in making the comparison. For instance, in comparing $\frac{2}{3}$ of a mile with $\frac{3}{4}$ of a mile, think of both as twelfths, but mention only the **number** of twelfths; so we simply compare 8 with 9.

The same method is applied to the solution of problems in compound proportion. To illustrate: If a tank 12 ft. long, $4\frac{1}{2}$ ft. wide and $\frac{2}{3}$ of a foot deep holds 270 gallons, how many gallons does a tank 24 ft. long, 3 ft. wide and $\frac{7}{8}$ of a foot deep hold?

$$\begin{array}{r}
 7 \qquad \qquad 135 \\
 21 \times 2 \times 2 \times 270 \text{ gal.} \\
 \hline
 = 472\frac{1}{2} \text{ gallons} \\
 \cancel{16} \times 3 \\
 2 \times 4 \times 8
 \end{array}$$

Since a tank 12 ft. long contains 270 gallons, one 24 ft. long contains twice as much. Since one $4\frac{1}{2}$ ft. wide contains that amount, one 3 ft. wide contains $\frac{2}{3}$ of that amount. Since one $\frac{2}{3}$ of a foot deep contains a certain amount, one $\frac{7}{8}$ of a foot deep contains $\frac{21}{16}$ of that amount.

So in finding the number of any units of given dimensions contained in a given volume, we compare the dimensions of the whole with those of the unit; as: How many cords of wood in a pile 40 ft. long, 30 ft. wide, and 6 ft. high?

Solution: Since a pile 8 ft. long, 4 ft. wide, and 4 ft. high contains 1 cord, a pile 40 ft. long, 30 ft. wide, and 6 ft. high contains $5 \times 15 \times 3 \times 1$ cord

$$\begin{array}{r}
 \hline
 = 56\frac{1}{4} \text{ cords} \\
 2 \times 2
 \end{array}$$

Again, in reducing quantities from lower to higher units, the same method — comparison — is used; as: Reduce 5 rods, 4 yards, 2 ft., 6 in. to rods. 6 in. = $\frac{1}{2}$ ft. $2\frac{1}{2}$ ft. is $\frac{5}{6}$ of 3 ft., or $\frac{5}{6}$ yd. $4\frac{5}{6}$ yards is $\frac{29}{33}$ of $5\frac{1}{2}$ yds., or $\frac{29}{33}$ rd. Hence the whole quantity is $5\frac{29}{33}$ rods.

So in division of decimals we teach the pupils to place the decimal point in the quotient as soon as the proper order is reached

instead of counting the number of orders after the division. This is easily done by reducing the dividend to the same unit as the divisor, when they may be compared as integers. To illustrate: If we are to divide 25.67893 by .035, since the divisor is a certain number of thousandths, we reduce the dividend to thousandths by simply placing a mark (\wedge) after the thousandths digit; then when that digit is reached place the decimal point. It is well to write the quotient above the dividend, not only because it makes the work more compact, but because, the decimal point coming directly over the mark placed in the dividend, error is less liable to occur.

$$\begin{array}{r}
 733.68 \\
 .035 \overline{) 25.678\wedge 93} \\
 \underline{245} \\
 117 \\
 \underline{105} \\
 128 \\
 \underline{105} \\
 239 \\
 \underline{210} \\
 293 \\
 \underline{280} \\
 13
 \end{array}$$

In percentage we dwell upon the fact that the per cent is simply a number expressing the ratio of a quantity to a unit of measure, and, consequently, like any number, may be applied only to its unit. The pupils are led first to determine the unit, as, in profit and loss the unit is the cost, as it is the quantity with which the profit is compared; in commission it is the buying price when buying, the selling price when selling, etc.

The following general directions are formally stated for solving problems in percentage:

1st. Determine the unit.

2d. If the unit is given, apply the per cent to it.

3d. If the unit is not given it must be represented by some convenient form, and two quantities must be found equal to the same thing, hence equal to each other.

These formal directions are given only after the pupils have discovered through the solution of simple problems that this is just what they really do in the solution of any problem.

In illustration of this method take an ordinary problem in commission involving both buying and selling.

My agent sells for me \$1030 worth of flour at 2% commission, and with the net proceeds buys wheat, deducting his commission at 3%. Required the cost of the wheat.

Since in the first transaction the agent is selling goods, the unit is the selling price, so the commission is 2% of \$1030, or \$20.60, leaving the net proceeds \$1009.40. In the second transaction the unit is the buying price which is not given.

100% of the buying price = buying price.

103% " " " " = " " and commission.

\$1009.40 = " " " "

103% of buying price = \$1009.40.

Buying price = $\frac{100}{103}$ of \$1009.40 = \$980.00.

In finding what per cent one quantity is of another we simply compare the whole with the unit if the comparison can be easily made, as in the following problem:

Goods costing \$5000 are sold to gain \$2000. Required, the gain per cent. The gain is $\frac{2}{5}$ or 40% of the cost.

The method used in case the given quantities are not easily compared may be shown in the solution of the following:

Goods costing \$2536.45 are sold to gain \$75.26. Required, the gain per cent.

Solution: Had the gain been one per cent, it would have been \$25.3645, but since the gain is \$75.26 it is as many per cent as there are \$25.3645 in \$75.26 or $2.9 = 2.9\%$.

In our arithmetic classes we try to emphasize the importance of making each new subject treated a natural outgrowth from that previously pursued, and of never giving a direction until the need is felt; that rules should be memorized and followed only in the very rare cases when their use will materially save time; that in the lower grades explanations should be made by mere illustration, rather than by the use of general principles; that in the higher grades the converse is true; that the complete, accurate definition has no place in the mental equipment of the child, while it is a most necessary adjunct to the teacher's pedagogical tool chest.

While the physical object should have little or no place in the mathematical work of the higher grades, yet its analogue, the mental image, should be ever present. Pupils are too prone to think of figures rather than of magnitudes. Many a time one who seems to be hopelessly floundering is brought to his senses by being told to look at the thing itself, and see how it is. Hence in so-called business problems the pupil should enter into the transaction himself, doing just what the supposed participant did.

As an exercise in mathematical judgment a great deal of estimating is demanded; in fact, with most of the problems only approximate results are required. It is astonishing to find how little our pupils are trained in this matter of judgment. Results manifestly absurd are accepted without question. It is a good sign that in one or two arithmetics recently published many problems are given requiring only approximations.

Roughly speaking, about one-third of the recitation time above the fifth grade should be given to written work, one-third to accurate oral work, and one-third to forecasting — giving approximate results.

It should be the aim to free the pupil from the influence of the printed page, to lead him to deal with his problems as in real life. To this end, problems should be introduced involving actual occurrences taking place about him and he should be directed to make problems of his own.

General References: McMurry's *Special Method in Arithmetic*; Young's *The Teaching of Mathematics*; Smith's *The Teaching of Elementary Mathematics*; Myer's *Monograph, Deeper and Richer Meanings of Elementary Mathematical Teaching*.

II. SUBJECT-MATTER

FIRST GRADE

(INTRODUCTORY TO ARITHMETIC)

(Numbers 1 - 100)

1. Counting by 1's, 2's, 5's, and 10's.
2. Finding sums by counting.
3. Comparing groups thru counting.
4. Using fractions $\frac{1}{2}$, $\frac{1}{4}$.

5. Telling time by whole, half, and quarter hours.
6. Using inch, foot, yard, pint, and quart measures.
7. Reading and writing figures.

Although this definite amount of work is covered, it is taught incidentally rather than formally. Opportunities are seized, or made, which require the child to do those things which give him a rational conception (steadily growing in definiteness) of the numbers found between 1 and 100, and of the other standards of measurement mentioned above.

References: See general references; Language, Number and Construction, Frances Lillian Taylor, in *Primary Education*, Jan.-June, 1902; Hall's *Primary Arithmetic*, Introduction; Teachers' College Record, Jan. 1909, pages 1-70; Walter's *Number Manual*; The Curriculum of the Elementary School, reprinted from Teachers' College Record, 1908, pages 93-100.

SECOND GRADE

(Numbers 1 - 100)

1. Learning the 45 addition facts: combinations of numbers thru 10 in the first semester, and later adding 10 and 9 to all numbers, adding doubles, and the 9 remaining combinations.
2. Using the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$.
3. Using cent, nickel, dime, quarter, fifty-cent piece, and dollar (toy money).
4. Reading and writing figures.
5. Writing examples in addition, in column form chiefly.

Through opportunities arising incidentally in school management, hand work, and free play, and in especially prepared games and dramatizations, the children increase the intelligence and definiteness of their numerical concepts. Accuracy and speed are gained through competitive games and drills.

References: Those given for first grade and The Curriculum of the Elementary School, pages 163-167.

THIRD GRADE

Since, beyond the second grade, number work gradually differentiates itself into a separate "study" having its own body of thought as well as its definite processes, at least three distinct tho

overlapping aims must be kept in mind. These are: (1) To make pupils feel, thru natural life-situations, a vital **need** for each of the fundamental operations; (2) To help pupils to the mastery of these mathematically essential operations so that work may be done with almost machine-like precision and speed; (3) To find such uses for these operations in the child's social life as to point to the value of their being automatically learned, to give children a feeling of power over certain economic situations, to arouse "deep interest, surprise, and excitement" over the "valuable thoughts" introduced, or to contribute to their actual knowledge.

In September all classes are given from two to five weeks' careful review of all preceding work, whereas mid-year classes need only a brief review, if any, since thruout the year, all mathematical facts once conquered are constantly reviewed and employed.

References: Same as general, plus various text books in arithmetic — D. E. Smith, Young & Jackson, Milne, Myers, and others.

B Class

1. Reading and writing of numbers of six orders.
2. Additive combinations perfectly learned and applied to all combinations below 100.
3. Column and long addition mastered.
4. Comparison of the fractional units of circles, surfaces, lines, and solids.
5. Halves of **any** numbers.
6. Thirds and fourths of evenly divisible numbers, and especially such numbers as are needed in denominate number tables.
7. Compound numbers learned in earlier grades constantly used, and such others added as are needed in computations, and in applications of processes to life problems.
8. Sense perception constantly exercised in estimating, in measuring, in constructive work, etc.
9. Problems with one condition and problems requiring diagrams to aid in the solution of the problem — not to illustrate it after it is solved.
10. Texts: Hall, Arithmetic Primer, pp. 1-63. Supplementary: Walsh, Primary Arithmetic, pp. 1-25, to subtraction. Note: Solve all "Slate Problems" mentally, however; and in general avoid over-much written work. Additional texts in contemplation.

A Class

1. After a thoro review of all previous work, conquer the subject of subtraction. Use Walsh's Primary Arithmetic, pp. 25-42, and much outside work of the same nature.

2. Apply both addition and subtraction to problems that are worth while, and to those arising in other classes.

3. Fix use of terms sum, difference, product, etc., by daily use.

4. Keep up practice upon subjects already covered, but do not let this work degenerate into mere repetition. Test briefly but frequently upon all points covered, teaching **good form** for written work.

5. Recall simpler multiplicative combinations already learned, and use in easy multiplication and division. Use also in fractional form, as $\frac{1}{10}$ of 120; $\frac{1}{2}$ of 64; etc.

6. Employ fractions and ratios as used in denominate number tables; halves of all numbers, thirds and fourths of many numbers, fifths and tenths of evenly divisible numbers, sixths and twelfths used in linear measure, in the table of time, and in use of ones in a dozen, sevenths in studying days in a week.

7. Emphasize skill in measurements, and the relations of units of measure in each denominate number table used.

Text: Hall, Arithmetic Primer completed, i. e. pp. 63-108.

Note: If done thoroly, this will result in the mastery of the earlier multiplication tables, but, **at this point**, the pupil should not be held back to master them. The table of 2's as a whole, and a few **parts** of other tables (as required in work with compound numbers) may be drilled upon and used in simple examples and problems.

Some mid-year classes may be able to begin the Rational Elementary Arithmetic.

FOURTH GRADE

B Class

1. Review any work done in Rational Elementary Arithmetic, as well as the mechanical work of preceding grades.

2. Teach the multiplication tables in the order of their least difficulty, all along applying facts learned, to the processes of long multiplication, short division, and simple factoring, and especially to economic problems, one of which is bill-making.

3. Simple bill-making as a drill in multiplication. Children study prices and make own bills for class use.

4. From this grows the need of knowing how to read, write, and compute U. S. money.

5. As longer multiplication examples are given, there comes the need of notation and numeration to millions or beyond, so we develop the important principles of Arabic notation.

6. Ratio and fraction work are emphasized in the text.

Text: Belfield & Brooks, Rational Elementary Arithmetic, pp. 7-68

Walsh, Primary Arithmetic as needed for supplementary drills in multiplication.

Reference: "The Multiplication Tables" by Theda Gilde-meister — a 10c pamphlet, published by A. Flanagan, Chicago.

A Class

1. As before, reviews must be frequent, but intelligent and spirited as well. Larger numbers in multiplication are drilled upon.

2. Long division with two figures in the divisor taught.

3. Concrete denominate work with construction and drawings emphasized.

4. Technical terms used in all the fundamental operations should by this time be so thoroly fixed as to make possible the derivation of good definitions.

5. The principles of Roman notation mastered with notation and numeration thru M. Dates written.

6. Daily practice in using ratios, fractions, and denominate numbers, excellent work on which is found in the text.

Text: Belfield & Brooks, Rational Elementary Arithmetic, pp. 68-127.

Walsh, Primary Arithmetic, pp. 42-153 for supplementary work.

FIFTH GRADE

B Class

1. Review work of previous grade.

2. Complete the multiplication tables.

3. Drill in the fundamental processes for speed and accuracy.

4. Long division using more than two figures in the divisor.

By the end of the B class the fundamental operations should be well in hand.

5. Simple denominate number work dealing with the units used in common life — linear, surface, cubic, liquid, dry, avoirdupois weight, measures of time, United States money. Develop units by actual measurement and build up the tables.

6. Common fractions — divide a whole and name parts; construct whole from parts.

7. Concrete problems involving small fractions, introduced without formal analysis.

8. Problems occurring in connection with the work of the grade — manual training, geography, history, domestic art, etc.

9. Children are led to invent problems.

10. Special stress is laid upon form and neatness of the written work.

Text: Belfield & Brooks, *Rational Arithmetic*, pp. 127-185, and 197-199 for division. Supplementary: Milne, *Progressive Arithmetic*, Books I and II; Smith, *Primary Arithmetic*; Myers, *Book II*.

References: All given above.

A Class

1. Drill and problem work involving the fundamental operations.

2. Measurements — linear, square, cubic, liquid, dry, avoirdupois weight, time, paper. Thoroly master the practical parts of tables.

3. Addition and subtraction of simple fractions. Other fundamental operations in fractions used as occasion requires.

4. Bill writing, with stress laid upon form; finding amounts of; receipting. Material for this is furnished by work of the other subjects, especially manual work and domestic art.

5. Problems growing out of work in other subjects.

6. Original problems.

Text: Belfield & Brooks, *Rational Elementary Arithmetic*, pp. 185-262. Supplementary: Smith, *Intermediate Arithmetic*; Southworth & Stone, *Book I*; Myers, *Book II*.

SIXTH GRADE

B Class

The work here deals very largely with facts and experiences within the daily life of the child. We take actual measurements

in and about the building; any building or repairing being done is noted; estimates of materials needed, cost of construction, etc., are made; room ventilation is tested. Practical problems arise in manual training, map drawing, and reading. Pupils are led to forecasting — giving approximate results — by such questions as: How long do you think this black board is? How wide? How much do you think it would cost to slate it? Estimate the amount of money needed to slate the boards in this room, etc. What do you suppose it costs to heat this building for one day — a week — a term — a year?

Text: Southworth and Stone, Book II, pp. 1-62, 197-236.

References: Southworth and Stone, Arithmetic, Book I; Smith, Intermediate Arithmetic.

A Class

Simple work in fractions, both common and decimal, is the basis of the work in this grade. Stress is laid upon the development of and drill in addition, subtraction, multiplication and division of fractions.

In addition and subtraction we train the pupils to find the least common multiple first by inspection, then by factoring. The greatest common divisor is similarly taught when fractions are reduced to lower terms. In multiplication and division of fractions much time should be given to rapid work in which one integral term is included.

Treat decimal fractions, not as a subject new and distinct, but show that, since the relations between the orders of decimal fractions is identical with that between the orders of integers, all operations may be performed in the same manner as in integers.

Very simple problems in interest are taught as an application of decimals.

Text: Southworth and Stone, Arithmetic, Book II, pp. 68-96, 111-174.

SEVENTH GRADE

B Class

The study of measurements occupies the entire semester. The topics considered are: Measurements of angles; of lines; of surfaces, including rectangles (with application to land, flooring, roofing, carpeting, papering), triangles, and circles; of solids, including cubes, prisms, and cylinders.

Text: Southworth and Stone, Arithmetic, Book III, pp. 85-131. Sensenig and Anderson, pp. 139-161; 169-185.

A Class

The study of percentage, with application to profit and loss, interest, and commercial discount, is the work of the semester.

All intricate problems are avoided, the aim being to bring about a thoro comprehension of the principles of percentage as applied to simple problems. The relation of percentage to common fractions is emphasized. To this end such per cents only as may be readily changed to common fractions are dealt with at first.

Text: Southworth and Stone, Arithmetic, Book III, pp. 131-161; Sensenig and Anderson, pp. 198-217; 220-228.

EIGHTH GRADE

B Class

The first six weeks are occupied with applications of percentage, the advance work including commission, insurance, and taxes. The remainder of the semester is given to a study of means of saving and investing money, and of cancelling indebtedness. The topics included are:

1. Banking — a study of the various kinds of banks, their purpose and safety, and the method of opening a bank account.
2. Loaning money — promissory notes and review of interest.
3. Stocks and bonds — a study of the organization and importance of corporations, the work of stock exchanges, differences between preferred and common stock, and between stocks and bonds.
4. Paying and collecting money by telegraph, registered letter, post office or express money orders, checks, and drafts.

A Class

During the first six weeks teach square root and the metric system and review the topics previously studied. This review work may be continued during the remaining twelve weeks or algebra may be introduced. In algebra teach the interpretation of simple algebraic expressions, give simple work in the four fundamental processes and study the equation, employing it in the solution of problems previously solved by arithmetic.

GEOGRAPHY

I. INTRODUCTION

The value of any subject in the school course depends upon the extent to which it develops the powers of the pupil and prepares him for adult life by giving a practical education, not only practical in the commercial sense, but also in the larger sense of the complete and harmonious development of the mind and body towards the realization of good character, right citizenship, and social worth. Hence we may define geography as the "relation of the earth to life." Measured by this standard the educational value of geography is high. It makes for refinement, character, and a broad philanthropy by bringing the child into contact with the earth and the heavens and revealing to him the beauty and grandeur of the Creator's work and our dependence on his laws; by explaining how these laws determine various environments which in turn govern the occupations, the methods of life, and the mental and physical conditions of peoples the world over; and by showing how the consequent difference in productions brings about an exchange of commodities, and results in the interrelations of peoples and individuals, the dependence of one person on another, and the inter-dependence of all. It gives culture by acquainting the pupil with the ideas, institutions, and the culture of other peoples; and, like travel, for which it is a substitute, it tends to produce breadth of mind and liberality of thought. It develops a spirit of investigation and gives impetus to seek the truth. It is a valuable aid to other subjects, especially language work and reading, nature study, and history. It gives the pupil a fund of information that will make his life more full and useful and will subsequently prove of daily value in conversation, reading, and business. It makes the pupil feel at home in the world he lives in; and helps him to see that true citizenship is partnership in every good undertaking.

GENERAL REFERENCES:

Special Method in Geography, McMurry.

New Basis of Geography, Redway.

Course of Study accompanying text books, Dodge.

Home Geography, McMurry.

Excursions and Lessons in Home Geography, McMurry.

International Geography, Mill.

In the Journal of Geography:—The Importance of Geography in Education, James Bryce, Vol. I, pp. 145-51, 206-13.

On Methods of Teaching Geography, T. G. Rooper, Vol. I, pp. 70-79.

Home Geography, Davis, Vol. IV, p. 1.

Oswego Geography Course, Farnham, Vol. V, pp. 109 and 211.

Function of Geography in Elementary Schools, Bagley, Vol. III, p. 222.

Geography in Intermediate Grades, Bagley, Vol. IV, p. 299.

Correlation of Geography and History, Allen, Vol. II, p. 404.

Training Teachers for the Study of Home Geography, Philip Emerson, Vol. I, pp. 391-400.

Geography in Germany, The Primary and Secondary Schools, J. R. Smith, Vol. I, pp. 420-30.

The Course of Study in Geography at the Speyer School, Teachers' College, Vol. II, pp. 83-95.

Geographical Exhibitions; Their Value and How to Plan Them, A. De Riemer, Vol. II, pp. 136-44.

Geographical Text-books and Geographical Teaching, M. K. Genthe, Vol. II.

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What to teach in Geography, Henry McCormick, Vol. I, pp. 11-20.

A Lesson Plan for the Study of a Natural Product, Clare L. Poe, Vol. I.

Illustrative Lesson upon Latitude and Longitude for Fourth Grade or Above, Theda Gildemeister, Vol. I.

A List of Books, Reports, and Articles Dealing with the Teaching of Geography, J. F. Chamberlain, Vol. I.

In the Journal of School Geography:—A School Course in Geography, R. E. Dodge, Vols. IV and V.

II. SUBJECT MATTER

PRIMARY GEOGRAPHY

Primary geography, as we treat it, has to do with man's resources and adventures, in acquiring shelter, food, and clothing, as exhibited in the child's immediate vicinity. The child must relive, to some extent, what man has done, to gain any understanding of his present complex environment. This knowledge is essential as a basis for an intelligent appreciation of the physical and political geography of the world, treated later in the grades.

Necessity was the force that produced in man effective effort. The child feels no such motive, but his instincts of activity, imitation, and construction serve as incentives to the actual doing, essential in gaining a personal appreciation, of course crude, of man's problems and their solutions.

Change is necessary to consciousness; it is when the child leaves his home life regularly each day to enter the larger and different sphere of the school, that he gains his first clearly conscious conception of home relations and conditions. These are made evident and impressed through much of his work in the kindergarten. In the primary grades he is ready for the beginning of a unified achievement along geographical lines, gaining in the first two years, increasingly definite conceptions of certain type forms of shelter, sources of supply of food and clothing, means of transportation, and of typical, concrete, natural objects and phenomena, which can appeal to him at this stage of his development. In the third year, he continues thru the study of distant family groups, that which helps him to interpret his later study of the world.

I. NATURAL ENVIRONMENT

FIRST GRADE

September

- a. The sun: location at different hours (continuing in observation and comparison of hours and position thruout the year); noting shadow of child at different hours as to length and position; telling time (sun dials); horizon; points of compass; effects on children and other organic and inorganic life, heating; coloring, growth, killing of germs. b. Great dipper and north star: direction; change of position; telling time; compass. c. Fall flowers: color; size; form; odor; habitat.

October

- a. Fire: need, ways of starting, uses, rising currents, winds.
- b. Birds: latest departure of summer birds; outlook for winter birds.
- c. Leaves: color, form, time of dropping compared with other trees.

November

- a. Moisture: clouds, rain, fog, dew, steam (power), evaporation, condensation.
- b. Temperature: effect upon plants and animals; means of protection; thermometer.

December (Time given to preparation for Christmas).

January

Freezing: crystalization (water, mineral); effects of freezing upon water, fruit, vegetables, soil; use of cellar, of refrigerator.

February (Time given to celebration of its birthdays of great men.)

March

- a. Soil: kinds, use to plants, effect of animals that burrow, clay products.
- b. Seeds: shape, color, contents, planting in glasses of water and in pots of earth.

April

- a. Birds
 - b. Goldfish
 - c. Flowers
- Noticeable characteristics in appearance and habits.

May and June

School or market garden: food plants and seeds, effects of warmth and moisture on growth, continuing March work.

General

Year's history of certain trees, and butterflies.

SECOND GRADE**September**

Report on growth of plants of previous spring (visiting school garden), harvesting of garden produce and fruit; canning, drying, and storing.

October

- a. Life histories of the cat and dog. Home life of the squirrel.
- b. Planting bulbs.

November

Habits, care, and value to man of horse, cow, and sheep.

December (Time given to Christmas preparations.)

January

Rocks: sandstone: origin; limestone fossils and story; quarrying, use.

February

Coal: uses, kinds, mining, storage, transportation.

March

Metals: copper, lead, zinc, iron, tin— characteristics, uses, sorting, mining, preparing for use.

April

- a. Birds: return, where during winter, habits, food, effect on crops, use; domestic fowls.
- b. Aquarium studies: crayfish, fish, frog.

May and June

- a. Planting cotton, flax, tomatoes, and corn, in breakable boxes in soil that will not cake; later transplanting to garden.
- b. Wild spring flowers.
- c. Fruit trees: flowers, leaf, fruit, enemies.

General

- a. Year's history of certain trees and insects.
- b. Keeping weather record thruout year.

II. ARTIFICIAL ENVIRONMENT**FIRST GRADE****B Class**

A. Shelter, food and clothing, as found in a typical house in the child's neighborhood, with constant reference to the child's own home.

- 1. Value: a. Protection from weather. b. Protection from society. c. Providing convenience for the different activities of home life.

- 2. Appearance and location: a. Material. b. Color. c. Size. d. Site: yard, neighborhood, relation to school, stores, neighbors, country; conveniences in transportation, street cars, delivery wagons, etc.

3. Divisions.

- a. Living room: 1. Use; physical comfort, social pleasure, reading, sewing, etc. 2. Furnishing; wall paper, curtains, rug, chairs, couch, table, book case, fire

place, etc. (Spinning and weaving are done here.)
3. Associated lessons; care of room, courtesy to others enjoy-
ing room, charm of story hour before the fire, etc.

b. Bed room: 1. Use. 2. Furnishing. 3.
Associated lessons; care of room, air at night, sunning,
airing and making of bed; sleeping alone, etc.; care of day
clothing at night.

c. Bath room: 1. Use. 2. Furnishing. 3. Associated
lessons; care of hair, teeth, nails; bathing, etc.

d. Dining room: 1. Use. 2. Furnishing. 3. Asso-
ciated lessons; setting the table, serving, and courtesies at table.

e. Kitchen: 1. Use. 2. Furnishing. 3. Associated
lessons; cleanliness, value of boilingwater for purifying, use
of refrigerator.

f. Pantry or Basement: 1. Use. 2. Furnishing.
3. Associated lessons; need of protection from cold for cer-
tain foods, system in arrangement.

A Class

B. Direct sources of supply for the home.

1. Drygoods store.

a. Stock: (1) Kinds: (a) Cotton (b) Linen
(c) Woolen (d) Silk (e) Ribbons, laces, embroideries, col-
lars, gloves, etc. (f) Notions. (2) Sources of supply: Fac-
tories. (3) Care: (a) For inspection. (b) For cleanliness.
(c) For protection from moths. b. Conveniences: (1) Count-
ers (2) Cash registers, etc.

2. Meat market: treated similarly.

3. Grocery store: a. Stock: (1) Kinds: (a) Vege-
tables. (b) Fruits. (c) Dairy products. (d) Cereal products
(2) Sources of supply: (a) Farm. (b) Factory, etc.

SECOND GRADE

A. Local sources of supply for the stores

1. Farm: a. Products: (1) Cereals (2) Vegetables
(3) Fruit (4) Live stock (5) Dairy products b. Conven-
iences: (1) Buildings (2) Machinery

2. Factories: a. Finished product b. Raw material
c. Process of converting raw material into finished product.

B. Vehicles used in transportation between farm, factory,
store, and home

Method for all the primary work:

1. Recalling child's experiences through questioning.
2. Making excursion.
3. Reproducing in clay, sand, pasteboard, wood, etc.
4. Dramatization.

References

Elementary Geographies, King, Tarr, McMurry, Dodge; Common Minerals and Rocks, Crosby; Systematic Science Teaching, Howe; Special Method in Elementary Science, McMurry (note bibliography).

THIRD GRADE**(First World Spiral)**

The work pursued up to this point should have furnished the child with a stock of definite ideas regarding his own environment. Physical features, climatic conditions, the materials used for food, clothing, fuel, and constructing buildings have all been studied at first hand, while ideas regarding direction and distance, the organization of home and community life have been developed. The child is now ready to learn of single homes beyond his own horizon. What method shall be followed? He is more interested in another child than in any other object. Therefore his imagination should center about the activities of child life. His imagery is controlled by objects immediately about him, but, when developed, his imagination has almost as great an impelling power as objects from without. Hence, child-life in other lands becomes the next logical step. This can probably be best based on the stories of the "Seven Little Sisters" and "Each and All" by Jane Andrews.

The **Seven Little Sisters** should really occupy more than a semester and **Each and All** can easily be done in less than that time, there seems no better way of dividing the year's work than to give each class one book. However, when a class completes the B work in midyear and remains in the same room for A work, the use of **Seven Little Sisters** may be continued in A; but when the B work is completed in June, the field should be covered, even if not so intensively done. A fall term A class should first review **Seven Little Sisters**, and all A classes can well afford to spend much time in supplementary reading upon the various topics arising in the work—(Spyri's *Heide* has been much loved by several classes).

The work of each semester is divided into about eighty lessons, thus allowing extra time for seat work and for reviews.

B Class

Text, Seven Little Sisters, Andrews

Prelude and Ball Itself	3 to 5 days	The Brown Baby	5 to 8 days
Agoonack (needing less time when incent feature of the first and second grade work)		Eskimo life has been a prom- inent feature of the first and second grade work)	8 to 14 days
Gemila	13 to 15 days	Jeannette	13 to 15 days
Pense	9 to 12 days	Manenko	9 to 12 days
Louise	13 to 15 days	Summary	2 days

A Class

Text, Each and All, Andrews.

Agoonack (many special topics here to be emphasized)	12 days
Manenko	16 days
Gemila	14 days
Pense and Lin	14 to 20 days

(One year this was made the basis of our closing entertainment, the children doing much toward its dramatization and in the making of costumes.)

The Brown Baby 4 to 6 days Louise and Jeannette 18 to 25 days.

As Miss Andrews does not definitely locate the home of these two sisters, and since Minnesota fulfils all the conditions described, we choose to make Louise and Jeannette more like real sisters—living in our own state. The pupils are thus introduced to those features of their state which pertain to the making of a **home**. They learn of the great pine woods whose healing breath cures many an invalid, of the lumber furnished by these woods to the parents of Louise and Jeannette, and of the processes necessary to change these great trees into useful articles for the home. They learn the source of the flour which makes the bread eaten by these two girls, and the clay bed from which Jeannette makes her Christmas presents leads naturally to a talk on the great Pipestone clay beds, famed in Hiawatha. These are a few of the many delights that the little Minnesota "sisters" indulge in, and to state the exact number of lessons is difficult.

Summary 2 to 5 days

References: For detailed daily outlines, aims, methods of teaching, and forms of seat and home work, see Gildemeister's Suggestions for Use of Seven Little Sisters and Each and All (In preparation for press); Carpenter's Geographical Readers; World and People Series; and special references for each locality as needed, e. g.: Arctic books by du Chaillu, Kane, Peary, Nansen; South African books by du Chaillu, Livingston, Stanley; William Tell for Switzerland; etc.

FOURTH GRADE — HOME GEOGRAPHY

(Supplement all this work by numerous exercises.)

1. Direction and Distance — Plat in sand the school room and campus. Also route from home to school. Then map the same sections, studying general characteristics of simple maps.

2. Study the home city and surrounding country as to

a. Large Sections (The work in the first three grades has been upon the **single** home, store, farm, mill, etc. Here we are able to **generalize**). Study residence section of city; manufacturing section; business section; suburbs; truck farms; grain and potato farms.

b. Routes of Transportation and Locomotion — Trails, dirt roads, macadamized and paved roads; street car lines, railroad lines, boats on river (make maps). Study reasons for location, direction and character of roads. Show how they aid in interrelations of the home with nearby communities.

c. Other Public Utilities — Telephone lines, electric light, sewer, gas, etc.—who pays for them; need; arrangement; study the same for public buildings, fire and police department, health department, parks, play grounds.

d. Some of the problems of food and shelter as illustrated in the home products and industries.

(1) Garden products (Have school garden where children raise vegetables and flowers; and see their relation to life.

(2) Study farm products, animal and vegetable, and note the interdependence of and exchange between farm and city, connecting this with necessity for roads and means of transportation.

(3) River products, as fish, clams, etc.

(4) Raw material for building, as lumber (its source, method of production, etc.); brick; stone; cement.

(5) Fuel — Wood, coal, etc.

A Class

Take up more definitely the physical problems and features, and study in a more intensive way the typical occupations of the vicinity.

1. The Land Surface. (a) Study slopes wherever they may be found (in gutters, in gullies, from the bluffs to the river. (b) Ir-

regularities of surface—hills, plains, valleys — location of city and of school with reference to these as determining features.

2. Soils — Caused by the weathering and grinding of rocks; necessity to all plant and animal life; different kinds of soils and their adaptability to various uses (Illustrate all of this so far as possible by experiments and illustration. Test and learn to recognize different kinds of rock from which different soils are made).

3. Water—(a) The various forms in which it appears on top of the land. Gutter streams and rills; brooks; the great home river — Where does it come from, where does it go, its size, its importance in commerce, for pleasure, for support of the people thru food supplied; its islands, bays, peninsulas, and other common geographical forms; its swamps and windings; the lake — area, depth, origin, importance. (b) Underground water — wells, springs, etc. (c) Work of water — the general problem of erosion, sediment in streams, how it gets there, what becomes of it, what are its effects (good and bad), how does it effect drinking water, how erosion has carved the valleys and slopes, and laid down flood plain; variation in erosion according to steepness of slope, filling and draining of lakes (illustrate by sloughs).

4. The Air — Experiments to prove the presence of air; its use; forms of water in the air;— rain, dew, fog, clouds, snow, ice; evaporation and the dewpoint.

5. The Weather — Definite series of observations during one month. Summarize observations in simple rules. Note direction and velocity of winds. Construct weather vane; record precipitation; record kinds of days as to temperature, storms, etc.

6. Intensive work on occupations. Show need for division of labor. Make chart of principal local occupations. Find how many of these are represented by parents of class. Study and illustrate the occupations as to character and result.

7. More detailed work on distance, direction, and maps.

FIFTH GRADE

(Second World Spiral — Descriptive, culminating in simple causal principles — proceeding from consequence to cause.)

Having become acquainted with child life in various lands, and having studied home life intensively, the work is now to de-

velop a picture of the **world as a whole**. Do this by moving out radially into distant regions through the agency of imported food or other products with which the child comes in contact. Make long leaps into distant regions (say to Alaska in search of the possible source of gold in a child's pin); then make a type study of that region on the basis of the product chosen, and work back to the proper home connection by natural transportation routes, filling in on the return trip the large features of the lands skipped over on the outward trip. Select products which will lead north and then south from home, gradually building up the heat belts.

Have in mind continually that the final consideration here is to build up an idea of the simpler causal controls which have made the given region what it is. But do not give these at first. Deal descriptively with the **consequence** in the type study and gradually suggest the **reason** for the conditions found. These reasons will finally resolve themselves in certain elementary principles which the child is afterward to amplify and apply in the next great spiral (sixth and seventh years) which proceeds from cause to consequence.

B Class

Western Hemisphere.

A Class

Eastern Hemisphere, and summary of principles.

Also add some work on shape and size and grand divisions of the earth. Show how this great ball which has an outside covering of gases (called air) is not standing still, but is spinning away in the sunshine like a big top, and is moving rapidly along a path which leads it entirely around the sun every year. Extend the knowledge of surface features; develop shape, referring to old ideas, and giving proofs of present beliefs; expand idea of size and relation to sun; also deal more specifically with motions. Observe and record direction of sun at each hour of a certain day, also change in direction of shadow of post. Make sun dial. Record noon length of shadow of post on certain day of each week for semester. Spin a spotted ball to develop idea of axis, equator. With mounted globe and bright light (bicycle lamp) develop idea of day and night and of yearly motion. Recall seasons. Color a small globe to show heat and life belts; also show this relationship by pictures of plants and dwellings in these belts.

Finally (1) let the child see the earth as a sphere of rock, cool without, but heated within, and so nearly covered by a layer of water called the ocean, that only one fourth of its surface rises as land. (2) Show this land area as so irregular that it appears to be in nearly separate parts called continents, which divide the water into separate oceans. (3) Leave the child with a collected series of elementary principles which explain life conditions as a necessary consequence of these physical conditions.

Note — Do plenty of definite map reading in this grade. Also some free hand map sketching, and **drill** enough on location to fix the main continental features (oceans, continents, great divides and slopes, and a few important rivers and cities).

SIXTH GRADE

(Beginning Third World Spiral.)

B Class

The study of the geography of the eastern hemisphere, as seen from the casual standpoint, is the work of this grade.

The beginning can be made by a review and application of the following topics: Mathematical geography — form of the earth, proofs; size of the earth, proofs; rotation, proofs and effects; revolution, proofs and effects; latitude; longitude. All these are to be illustrated by apparatus.

Atmospheric circulation — location, causes, and names of planetary wind belts; conditions necessary to produce rainfall; causes operating in each belt, such as doldrums, low pressure areas, intercepting highlands, etc.

Ocean currents — causes and effects.

Vegetation zones — (See Herbertson's "Man and His Work," and map of life zones in Longman's Atlas.)

After a brief study (six weeks) of the above topics, apply the principles learned to the eastern hemisphere, beginning with the simplest unit, which is Australia. Study from maps physical features and coast line, wind belts affecting it, distribution of temperature and rainfall, drainage. From this study infer the plant, animal and mineral products, chief centers of commerce and transportation routes; then verify by text and reference. Follow the same plan with Africa, emphasizing the chief products of the con-

continent. Use the same method for the study of each of the three important countries of Asia.

OUTLINE

1. Australia 2 weeks.
Continental study. Topical studies: Sheep raising, gold mining.
2. Africa 4 weeks.
Continental study. Topical studies; Ivory, oil nuts, ostrich farming, dates, esparto, Nile valley products. Cape-to-Cairo railway.
3. Countries in Asia 6 weeks.
India — wheat. China—tea. Japan—silk.
Text: Tarr and McMurry.
Supplementary: Dodge, Advanced Geography; Carpenter, Geographical Readers; Herbertson, Man and His Work.

A Class

Eurasia from the causal standpoint.

Study the land mass in a broad way, following the outline given under the study of Australia. After two weeks of general work, begin the study of special areas of Europe, starting with the simplest forms, such as Spain or the Scandinavian peninsula, and culminating in the British Isles on account of the vastness and complexity of the commercial enterprises of the British Empire.

Study each country by the method given for the study of Australia, and continually relate its commercial activity to that of our own country.

The sand table should be used continuously. If possible, model a country the way it would look if weathering and erosion had never affected it. Then by a fine spray of water reduce the topography to the present form. Mill's International Geography will give the needed information about the origin of each country.

OUTLINE

1. Eurasia — general study 2 weeks
2. Europe 14 weeks
Special topics to be emphasized in each country.
a. Spain and Portugal: Wheat, olives. Mining of coal, iron, mercury. People.

- b. Italy and Greece: Historic places. Wheat, silk, fruits.
- c. Russia: Soil and climate belts, wheat. Manufacturing, mining. Possessions in Asia.
- d. Austria and Hungary: Mining, wheat, herds.
- e. Germany and Netherlands: Mining of coal, iron, zinc, salt, potash compounds. Manufacturing, transportation. People. Rhine valley.
- f. France: Wheat, grapes, silk, chinaware. Paris and its manufactures.
- g. British Isles: Wheat, flax. Country estates. Manufactures. Cotton, iron, steel, ship building. Manufacturing centers: Where? What? Why?
- 3. Comparative review of continents 4 weeks
Text: Same as B class.

SEVENTH GRADE

(Completion of Third World Spiral)

The work of the seventh grade is devoted to the study of causal geography in connection with the western hemisphere. The suggestions for continental study given in the preface to sixth grade, will be followed in the study of North and South America.

B Class

1. North America as a whole.
2. United States by groups, beginning with New England, since the Atlantic coast is the region of early English colonies, the subject of study in the history work of this class. In connection with the northern group of states an intensive study of our own state will be made.

A Class

1. North America continued in the study of Canada, Mexico, Central America and the West Indies.
2. South America as a whole.
3. States of South America in four groups
 - a. Amazon Valley and Eastern Highlands.
 - b. Orinoco Valley and Northeastern Highlands.
 - c. La Platte Valley and Southern Plains.
 - d. Andean Highlands.

Texts: McMurry, Dodge, and Adams (Elementary Commercial Geography).

HISTORY

I. INTRDOUCTION

If this subject is to be made to yield all the value it is capable of yielding, its possibilities in various directions must be comprehended by the teacher. The aim as well as the method must differ with the age and the mental development of the pupils. At all stages, however, there will be a mingling of purposes: The stimulation of the imagination; the building up of moral standards; the stimulation of social habits; the establishment of the proper attitude toward the state; and the development of intellectual power. Naturally the emphasis upon these purposes will vary constantly.

Even if our scheme of education were purely individualistic, i. e., looked only to the development of those powers of the child useful for promoting his personal profit or for the enlargement of his capacity for personal enjoyment, the subject ought to be in a course of study. It contributes to the development of mental qualities useful to the individual as such in every walk of life—to the development e. g. of the memory, of the power of discrimination, and of judgment. It is a culture subject; that is it takes the pupil out of his immediate surroundings, broadens his horizon, enlarges his experience of human life, and helps him to a better appreciation of the meaning of the every day facts of his own life. "The student," says Macaulay, "like the tourist is transported into a new state of society. He sees new fashions. He sees new modes of expression. His mind is enlarged by the widening diversity of laws, of morals, of manners." History opens a door to the enjoyment of literature since a knowledge of historical facts is necessary to an understanding of constantly recurring allusions in literature. Here perhaps lies the justification for presenting many of the incidents made the subject of study.

History must, moreover, be looked upon as a preparation for other studies such as political economy, civil government and other subjects which people may wish to study for the human interest they contain and the intellectual enjoyment they afford.

But our scheme of education is not purely individualistic; it has or should have a distinct social bearing. The subject should, therefore, supply knowledge, give opportunity for practice in organization, and produce an attitude of mind and heart useful to the individual not merely because he is a human being but because he is a member of society, a citizen of a republican state. History is properly called one of the "citizenship" subjects, because while knowledge of it may be regarded as a personal accomplishment, may open avenues to a larger life, and may give to those who study it an added power to deal with their private concerns, it has a special value in that the training it yields is just the kind needed by the citizen in performing his public duties. In dealing with public questions a citizen should have the power and habit of constructing into a whole, information gathered from various sources; of carefully discriminating between good and bad evidence; of making judgments where the evidence is sometimes incomplete and often conflicting; of following an argument from point to point and detecting its fallacies; and he should be able to approach such a study with perfect candor and fair-mindedness. For developing these qualities history has unbounded opportunities. No one lesson will offer an opportunity for training in all these respects, but on the other hand no lesson should ever pass without an attempt being made to cultivate some of these qualities.

The study of history should result in something more than an accumulation of facts, in something more, even, than intellectual training. From it should come a strengthening of the moral fiber, and a growth of patriotic purpose.

The moral influence of historical characters, as has often been pointed out, is frequently greater than that of the people whom children meet from day to day. The work of the lower grades, in building up right standards of conduct when dealing with either fictitious or historical characters, should be consciously continued by the teacher in the higher grades. This is not best done by "moralizing" on the part of the teacher. His effort should be to

make the stories carry their own moral. Usually this will be the most effective way of conveying a moral lesson. In the lower grades the qualities impressed as worthy of honor are personal qualities; heroism, devotion to one's fellows, unselfishness in rendering service, the effects of which can be seen at once. In the higher grades, while the simpler personal qualities mentioned will continue to be impressed upon the pupils, more complex civic qualities, the value of which is not so apparent, should be brought before the pupils. Such examples as the persistence of Columbus in the face of neglect and contumely; the aspiration of Raleigh and other Englishmen to enlarge the realm of Britain; of the French voyageurs to make a "New France"; of the Spaniards to make a "New Spain;" the self-denial and public spirit which lay back of all our wars, especially notable in the Revolution and the Civil War; the moral strength of Washington, John Quincy Adams, and others in undergoing the severest censure rather than yield in what they felt to be for the public good; the honorable position taken by these two presidents in regard to the civil service; the moral courage which led Clay to prefer to be right rather than to be president; the noble spirit of concession which led to the settlement of the crisis of 1876,—these and a thousand other incidents in our history show what is worthy civic conduct and should rouse the admiration of pupils and furnish them an inspiration to emulate such conduct in their own lives.

If the story of the country is well told, it cannot fail to inspire a love for those who have given it its higher character, confidence in its principles, and a determination to preserve and promote what is good and eradicate what is evil in our social and political life. This is patriotism. Do not let pupils suppose that patriotism consists in hating those with whom we have been at war, or in upholding all that the government has done, or in joining the army to fight the country's battles, though that is one way of showing patriotism. They should learn that the nation's greatest enemies are at home, in the persons of law-breakers of all kinds; of those who cheat the government; who use public office for personal ends; who win their way by corrupting the ballot, legislatures, and the like. They should learn that the sort of patriotism needed is that which demands of them an intelligent interest in public affairs, local, state and national; which demands

of them considerable self-sacrifice in performing the duties of citizenship; which will require them, whether it is agreeable or not, to condemn in friends and enemies alike all that tends to degrade private and public life or work to the injury of the Great Republic.

The history work falls into two periods. During the first period, covering the first five grades, the story, in which the life of the individual is the center of interest forms the material for study. In the earlier years the story is of chief value as a means of language drill or for the development of literary appreciation; but in the fourth and fifth grades it supplies material more and more useful for the real history study of the later grades. This real history work begins with the sixth grade when the center of interest shifts from the life of the individual to that of the nation.

The course of study is based upon the belief that the most thoro work should be done upon the history of our own country. The history of the United States is therefore placed at the end of the course, where the children, many of whom will never have an opportunity to study the subject in the schools again, will have the advantage of maturity and previous study in approaching the history of their own country. The subject runs thru the seventh and eighth years. This is preceded by a year's work in the sixth grade on the outlines of English History and this, in the fifth year, with the story of the Greek and Romans. This arrangement has the advantage of preparing the way for a more understanding study of United States history. It enlarges the child's view of the great field of human life with which history deals; it acquaints him with institutions other than those with which he is surrounded and thus gives him a basis of comparison; it gives experience in following in outline great movements in the life of a people; and gives him a truer view of the place of his own country in history. This arrangement of the course has a value independent of the use made of European history in the later part of the course. It acquaints him with something of the life of the three peoples who have made the greatest contributions to the world's progress; it furnishes in the lives of the characters studied nourishing ideals of private and public conduct; and it broadens the child's horizon.

The purpose and character of the work naturally vary with the periods named, and even with the year.

The method also must vary, but it must always hold in mind two facts (1) That children get little out of generalizations, and that therefore the past must be constantly made **real** by the presentation of much detail. This detail must be such as will naturally connect with elements of similarity or contrast in the child's own experience; it must make the past **vivid** and full of life-content. To say that "trade was interfered with" is not enough. The child wishes to know names of ports, of specific ships, of actual cargoes and voyages, with names of captain and crew. Other means of making the past real are pictures; construction; historical games; letters and diaries written by pupils but conceived as written in past historical periods; details from life of common people; literature.

(2) The second point to keep in mind is that mere lists of facts are dull and easily forgotten; but if organized about a great controlling principle they cling together by their own power and give a cumulative effect. To give lists of Dutch, French, Spanish, and English colonies with a few facts about each (such as date of founding, by whom founded, kind of government, etc.) is uninteresting and unprofitable work. To study them all in their relation to the great problem of "A Struggle for a Continent," puts life and worth into the situation.

In the first period (Grades 1 to 5) the pupils' work will be largely reproductive, but, even here, much should be done in developing the history-sense by requiring consecutiveness of thought and expression, and completeness and balance in the story.

These should be required also in the later period, and, in addition, some constructive work should be insisted upon, as in drawing inferences, making modest judgments, and in weaving into one account the material gathered from various sources.

References:—Special Method in History, McMurry; Teachers College Record, May, 1904, Suzzalo; *ibid* Marker; Studies in Historical Method, Barnes, pp. 75-105; Teaching of History and Civics, Bourne; Method in History, Mace; Report of the Committee of Eight; American History and Its Geographic Conditions, Semple; Teachers College Record, November, 1908—Johnson's Adaptation of History to the Grades.

II. SUBJECT-MATTER

FIRST, SECOND AND THIRD GRADES

(INTRODUCTORY TO HISTORY)

A basis for history, which as a separate study is not taken up until the fourth grade, is gained in the primary grades thru the tales, myths, stories of heroes, patriotic poems and songs treated in literature, holidays, celebrations, etc. In the hand work, also, and in the stories of Hiawatha and Agoonack, primitive life is introduced. In the third grade, we also study the food, clothing, houses, family life, religion, and government of the typical races—making constant reference to our own time.

We read and discuss Robinson Crusoe for a knowledge of home life in its simple primitive conditions, for Crusoe's vague knowledge of things and his lack of skill make him childlike in invention. His simple, plain, fanciful tale of toil and hardship has worth as well as fascination, and is typical of man's constant warfare with, and final conquering of, nature.

At times, "the method of handling this narrative (Robinson Crusoe) before the class will be similar to that used in teaching the fairy tales. A simple and vivid recital of facts, with frequent questions and discussions, so as to draw the story closer to the child's own thought and experience, should be made by the teacher. Much skill in illustrative device, in graphic description, in diagram or drawing, in the appeal to the sense experiences of the pupil, is in demand."

The sand-table is especially valuable here.

References:—Seven Little Sisters and Each and All, Jane Andrews; other geography references. Crusoe's Island, Ober; Robinson Crusoe, DeFoe. The Story of Ab, Waterloo.

Texts:—Robinson Crusoe by McMurry; The Tree-Dwellers (when not used in second grade), Early Cave Men, and Later Cave Men, Dopp.

FOURTH GRADE

While in this and the succeeding grades, history is taken up as a separate subject, it has a close connection with other subjects, especially geography, literature and reading.

At this age the story is often told by the teacher and reproduced by the class both orally and in written form. The dramatic, the personal, and the concrete are at the basis of the child's understanding as well as of his interest. We use maps, sketches, pictures, and comparisons with home objects. "Not only are his (the teacher's) descriptions more animated, picturesque, colloquial, adapting themselves to the faces, moods, and varied thoughts, and suggestions of the pupils, but there can be a discussion of causes by pupil and teacher, a weighing of probabilities, a use of the blackboard for graphic drawing or diagram, a variety of homely illustrations, and appeal to the children's previous experience and reading such as is impossible in the mere memorizing of a book."

But, whenever possible, texts are put into the children's hands so that they may learn how to get facts from the printed page, how to judge relative values of points given, and how to organize these for retelling.

B Class.

Early Colonial days; pioneer life in any section of our land, the emphasis is laid on local history, selecting material from stories of Hennepin, La Salle, Marquette and Joliet, General Sibley, the Sioux Massacre, Minnesota in the Civil War, and Governor Ramsey.

Texts: Stories of Colonial Children, Pratt; Stories of Great Americans for Little Americans, Eggleston; Pioneer History Stories, McMurtry.

References:

1. **Material** — Colonial Children, Hart and Hazard; Heroes of the Middle West, Catherwood; De Soto, Marquette, and La Salle, Pratt; The Discovery of the Old Northwest, Baldwin; American Leaders and Heroes, Gordy; Concise History of Minnesota, Neill; The History of Minnesota and Tales of the Frontier, Flandreau; Minnesota, Folwell; Winona and its Environs on the Mississippi in Ancient and Modern Days, Bunnell.

2. **To help teachers** — Value of Hero Stories, Helen Ford Staples; How to Tell Stories to Children, Sara Cone Bryant; Alice Morse Earle's books.

A Class

Leif the Lucky (1000), Columbus (1492), Cortez and Montezuma (1519-21), Cliff Dwellers, De Soto (1539), Coronado (1540),

Raleigh (1584), John Smith (1607), Henry Hudson (1609), Wm. Penn (1681), Oglethorpe (1733), Boone (1769), Crockett, Robertson, Lewis and Clark, George Rogers Clark, Fremont and Carson, Discovery of Gold (1849).

Texts: Viking Tales, Jennie Hall; America's Story, I and II, Pratt; Great Americans for Little Americans, Eggleston; Pioneer History Stories, McMurry.

References: The Story of the Thirteen Colonies, Guerber; Our Country's Story, Tappan; Hero Stories, Tappan; Household History of the United States, Eggleston; History of the United States, Fiske; Four American Pioneers, Perry and Beebe; Cortez and Montezuma, Pratt; Discoverers and Explorers, Shaw; B IV, references.

FIFTH GRADE

B Class

- I. Story of Hebrews (six weeks): Adam and Eve, Abraham, Joseph, Moses, Naomi and Ruth, Saul, David, Solomon, Daniel, Jesus.

References: The Bible; Young Folks' Bible History, Yonge; Old Stories of the East, Story of the Chosen People, Guerber; Stories of the Olden Times, Johonnot; Moral Instruction of Children, Felix Adler; Telling Bible Stories, Houghton; Story of the Jews, Hosmer.

- II. Story of the Greeks (12 weeks): 1. Story of the Gods; Zeus, Poseidon, Apollo, Orpheus, etc. 2. The Age of Heroes; Trojan War, Ulysses, etc. 3. Historical Age; early Sparta and Athens, Lycurgus and Solon, Olympic games, Persian wars, Pericles, Alcibiades, Socrates, Alexander. 4. Great things which Greece did for the world; her writers, architects, artists, orators; etc. In the study of the Greeks, the regularity and simplicity of their lives is emphasized; also their love of the beautiful. Language supplements this work and hand work is used to illustrate many phases of Greek life.

Teacher's Text: Greek Gods and Heroes, Harding.

References: Story of the Greeks, Guerber; Story of Odyssey and Iliad, Church; Greeks and Persians, Cox; Ten Great Events, Johonnot; Wonder Book, Hawthorne; Old Greek Stories, Baldwin; Plutarch's Lives; Age of Fable, Bulfinch; Stories of the Old World,

Church; Life of the Ancient Greeks, Gulick; Old Greek Life, Mahaffy; History of Greece, Botsford.

A Class

ROMAN HISTORY

The purposes of the course in Roman history which is taken in this class are to cultivate the natural interest of children in heroic men and brave deeds, to illustrate the faults and virtues of Roman character, to give familiarity with important events and famous incidents, to leave the impression that war is a brutal way of settling disagreements, and to leave an impression of the Roman "spirit of conquest, the capacity for organization, for law, and for government."

OUTLINE

- I. Introduction: 1. Connect with Greek History; for example, — What were Romans doing when Alexander set out against Persians? 2. Associate with the geography of Italy and Rome. 3. Show pictures of ruins of Rome.
- II. Kingdom of Rome: 1. Romulus, the founder. 2. Numa, the lawgiver. (Give stories, incidents, and descriptions to show primitive nature of Romans.)
- III. The Republic: 1. Struggle to establish it. Tarquin attempts to become king; Lars Porsena aids him; brave defense — Horatius; Courageous act of Mucius; Roman sense of justice — Cloelia. 2. Division of people into two classes: a. Causes. b. Names of classes. c. Early results; injustice to plebeians, establishment of tribunes. 3. Continued struggle to expand power: a. Leaders: Coriolanus; the Fabii; Cincinnatus; Camillus. 4. Written Laws: a. Need for them; how published. b. Results: their place in the education of boys; effect on the condition of the plebeians, effect on the development of law. 5. Growth checked—The Gaulish Conquest. 6. New Rome: a. Protected by Camillus. b. Improvements made. 7. Period of Conquest: a. The Conquest of Italy. b. Wars with Carthage; conquest of Sicily, of Carthage, Hannibal's Campaign in detail. c. Conquest of other Mediterranean countries. d. The Conquest of Gaul; Julius Caesar. 8. New Problems for

- Rome; a. Home conditions needing reform — The Gracchi.
b. The Civil Wars; what they were about, results.
c. Changes in Roman character, customs; home and home life; school life; dress.
- IV. The Empire: 1. Establishment of the Empire. 2. The age of Augustus Caesar: a. Great Writers: Virgil, Horace. b. The life of the people — in detail.
3. Period of weakness: a. Misgovernment by weak rulers. b. Civil war: Causes; results; people of all provinces made citizens; better rulers.
4. Reign of "five good emperors:" a. Trajan. b. Hadrian. c. Marcus Aurelius.
5. Period of civil strife: a. Results: Empire divided by Diocletian; strong rule checked strife.
6. Empire united under Constantine: a. First Christian emperor. b. Constantinople was built.
7. Downfall of Empire: a. Divided. b. Plundered by barbarians.
8. Christianity: a. Christ, the founder: Born in Augustan Age; put to death by succeeding Roman emperor. b. Growth of: Favorable conditions; a united Roman world; teachings spread by apostles—Paul; persecutions by Romans — causes, results; Rome accepts Christianity; Emperors become Christians — Constantine the Great; Christians increase rapidly in numbers and in power.
- Text: The City of the Seven Hills, Harding.

References: Young Folks' History of Rome, Yonge; Private Life of the Romans, Johnston; Story of the Romans, Guerber; Young Folks' History of the Roman Empire, Shepard; Historical Reader, Anderson; Ancient History, West; Great Events of History, Collier; History of Rome, Botsford; Ancient History for Young Folks, Botsford.

SIXTH GRADE

The work of this grade is the outlines of English history. More fully than heretofore the pupil is able to connect events with causes, to enter into community life and feeling, and to study movements as well as men. Attention is called to the historical importance of geographical and climatic conditions, of economic

changes, of movements of population, and the like. The textbook very properly groups the events narrated mainly about a few great men. But care has to be taken that the pupil gets more than the story of the person and the dramatic side of the event. The significant part of the Norman Conquest is found, not in the personality of the conqueror or in his battles, but in the introduction of new race elements, and in the modification that followed in social and political life. The "Story of Henry and Becket" tells, not merely of a spectacular quarrel, but gives a glimpse of a great struggle between the nation and the church. "The Story of Drake" is that of one of the builders of England's power upon the sea; the "Story of Spinning and Weaving" has an added interest when the pupil is made to see, even imperfectly, that it is vitally connected with the story of the "Great Reform Bill."

It is easy to attempt too much in such an outline study as is here intended, but the pupil should be able to grasp some of the threads that give unity to England's story — to follow the progress of the English from a group of loosely connected tribes to a compact kingdom, and the growth of this kingdom into a great empire; to get some idea of England's contribution to the world's welfare in developing the principle of representative government and in promoting personal liberty and protecting personal rights; and he should be able to appreciate the energy and force of character which have made the English the foremost people in the world. An opportunity of fixing the hold on some of these threads of England's history is found in the review by bringing together and organizing the children's knowledge on such subjects as the following: The growth of English territory; the race elements of the English people; how the kingdom was formed and became strong; relations with other countries, as Ireland and Scotland; England and the Continent, including its efforts to maintain the balance of power; the growth of the baron's power; steps in the rise of the common people; relations between church and state; changes in industries; industrial reforms.

While the story of England has in it ample enough means of culture to justify its place in the course of study, it is also valuable as a preparation for the study of United States history. Its value in this respect lies in enlarging the historical experiences of the pupils; in the practice given in following, in outline, historical

movements; and in building up such a back ground for American history that the pupils will see their own country in truer perspective.

B Class

- I. Relation of the geography of England to its history. Compare with the geography of Rome and Italy.
- II. Ancient Britain; 1. Celtic; a. Tribes: Gaels; Britons.
b. Primitive nature of people.
2. Roman; a. Cruel and tyrannical rule. b. Results of Roman occupation: roads, fortifications, forts.
c. Homes and life of the people. d. Christianity checked by persecutions.
- III. English Conquest; 1. Angles and Saxons, Teutonic tribes, conquered Britons; a. Their union under Egbert. b. Alfred, the most noteworthy Saxon king: his laws, translations, navy. c. Christianity established—its effects. d. Effects of the conquest on language; government; sense of liberty. e. Social and industrial changes.
- IV. Danish Conquest; 1. Brought new vigor and a spirit of independence into the life of the country. 2. Danes, with Angles and Saxons formed the Anglo-Saxon people.
- V. Norman Conquest; 1. William of Normandy gained throne of England. 2. Results: a. Introduced a more progressive spirit. b. Improved the language. c. Established feudal system of landholding. d. English and Norman peoples fused into English nation. e. Changed mode of life. f. Religious conditions; cathedral building.
- VI. Rise of English Nation; 1. Reign of Henry II (Plantagenet); a. Power of king established over the barons. b. Struggle between Church and Nation begun: Becket, Constitutions of Clarendon. c. Reforms in administration of justice; courts of justice established, trial by jury.
2. Reign of Richard I.; a. The Crusades were center of interest; a study of the Third Crusade. Results of the Crusades: new ideas brought from East, power of feudal lords weakened. (For conditions of society see *Ivanhoe*).
3. Reign of John :a. Misrule weakened power of king.

- b. Results: Great Charter was obtained which recognized rights of common people; strengthened power of barons; strengthened power of church.
 - 4. Reign of Henry III.:
 - a. The weakness of the reign.
 - b. Reforms led by Simon of Montfort.
 - c. Common people obtained a voice in Parliament.
 - 5. Reign of Edward I.:
 - a. Wales and Scotland conquered.
 - b. Parliament became a representative legislative body.
 - c. Customs tax introduced.
 - 6. Reign of Edward II.:
 - a. Scotland regained independence; Bannockburn; Bruce, Wallace.
 - 7. Reign of Edward III.:
 - a. Rise of English commerce; woolen factories established.
 - b. Beginning of Hundred Years' War with France; united English people more firmly, strengthened power of Parliament.
 - 8. Reign of Richard II.:
 - a. Rebellion of the peasants gained more freedom for the peasants and laborers.
 - VII. Destruction of Feudalism:
 - 1. War of the Roses—Barons against barons.
 - a. Reign of Henry VI.
 - b. Reign of Edward IV. Printing was introduced by Caxton; English language was unified.
 - c. Reign of Richard III. End of War. Results: power of lords destroyed.
- Text: Stories from English History, Warren, pp. 1-165.

A Class

VIII. The Absolute Power of the Crown.

- 1. Reign of Henry VII. (Tudor):
 - a. United factions in country.
 - b. Established a strong government.
 - c. America discovered.
- 2. Reign of Henry VIII.:
 - a. King ruled absolutely.
 - b. England severed her connection with Pope. King became head of Church in England.
- 3. Reign of Elizabeth:
 - a. Protestant religion was established.
 - b. Great age of English literature—Shakespeare.
 - c. Trade and exploration increased — Drake; Raleigh.
 - d. Social life.
- IX. Rise of the People's Power against the King's Power.
 - 1. Reign of James I.:
 - a. People demand religious freedom, Pilgrims settle in America.
 - 2. Reign of Charles I.:
 - a. Struggle between king and

nation. Petition of Right granted by king; the Civil wars.

3. The Commonwealth. Oliver Cromwell.

4. Reign of Charles II.: a. Restoration of king as the ruler. b. Dissatisfaction with ruling power. c. Plague and Fire of London. d. Great literary work of Milton.

5. Reign of James II.: a. Revolution against rule of King independent of Parliament and law.

6. Reign of William III. and Mary II.: a. People gained political liberty from absolute rule of king.

7. Reign of Anne: a. House of Commons becomes the ruling power. b. Duke of Marlborough upheld English power. c. Parliaments of Scotland and England united.

X. Government by the People.

1. Reign of George I.: a. Prime Minister and Cabinet appear.

2. Reign of George II.: a. Wm. Pitt, Earl of Chatham, an honest Prime Minister. b. Power of Great Britain extended: In India — Clive and Hastings. In North America: Growth of the Colonies; Conflict with the French; Wolfe.

3. Reign of George III.: a. Ireland united with Great Britain. b. The loss of the American colonies. c. War with France: Pitt, the statesman; Nelson and Wellington, commanders. Results: Increased power on land and sea; peace for Europe; Napoleon in exile. d. Industrial improvements: Spinning and weaving; steam engine and locomotive. e. Reforms: In jails — John Howard; slave trade — Wm. Wilberforce. Slavery in the colonies abolished.

4. Reign of William IV.: a. Great Reform Bill: Secured representation of people in Parliament.

5. Reign of Victoria — Democratic Era: a. House of Commons became true representative of people; the ruling power in nation. b. Power abroad maintained; Crimean War; Indian Mutiny suppressed. c. British colonies: Canada, Australia; South Africa; control over Egypt and India. Explorations in Africa, Livingston.

6. Reign of Edward VII.

7. The British Empire; the greatest empire in the world; how governed; its elements of strength.

Text: Stories from English History, Warren, pp. 166-462.

References: Handbook of English History, Guest; Source Book in English History, Kendall; Stories from English History, Church; Story of King Alfred, Besant; Child's History of England, Dickens; Historical Reader, Anderson; England's Story, Tappan; Story of the English, Guerber; Social England, Trail; School Atlas of English History, Gardiner.

SEVENTH GRADE

The pupil comes to the study of history in this grade with a considerable fund of information concerning persons and events, and with a more or less definite idea of the course of the nation's development. In adding new information to the old, the effort is not simply to increase the number of detached facts in the mind of the child, but to aid him in appreciating the facts of a higher order, and in interpreting them. While certain kinds of information will be made secure only by frequent drills, care is taken to avoid mere memory work. Appeal is constantly made to the pupils' understanding.

A few of the salient points upon which emphasis is laid are the following: (1) Our colonial history is less the history of the United States than it is of Europe. It is, properly viewed the story of the colonial expansion of various European countries. From that point of view, the children watch the progress of the Spanish, as step by step they become acquainted with, and acquire control of, one region, the French of another, the English of another and so on. The story of the revolt of the English colonies, which closes the year's work, is not only the story of the way a new nation was brought forth, but also of the way England lost the choicest of her colonial possessions. (2) There were certain forces at work in the home countries, certain causes operating to send forth a stream of emigrants to the new world. These forces determined the character of people who came out and they, in turn, largely determined the kind of colony established. (3) The climatic and other physical conditions in the new world determined the course of settlement, and, with the English especially, the character of their institutions in part. The waterways as well as coast indentations were of vital importance in determining where populations should settle, and they were frequently contended for by opposing na-

tions. (4) The European countries were not left to expand at will in the new world. From the beginning there was a conflict for the mastery of the continent. By 1763 the outcome of the conflict had been practically settled by the elimination of the Swedes, the Dutch and the French; but the end of the story has perhaps not yet been written. The latest phases of the struggle are the pushing of Spain out of the West Indies, 1898, our acquisition of Porto Rico 1898, and the retention of important rights in Cuba, and the more recent acquisition, 1904, of rights in the Canal Zone of Panama. A thread, therefore, running through our whole history is the progress of English speaking peoples in acquiring control of North America. Children are led to see the vital, logical relationship between the settlement at Jamestown, which gave the English their first permanent foothold on the continent, and all later acquisitions of territory. (5) The characteristics of social and industrial life in the different sections of the colonies are easily within the comprehension of the pupils and are given prominence. (6) For classifying and interpreting facts, it is helpful to look at history in "periods." The pupils are helped to gain an understanding of what constitutes a period, and to make such divisions of the story of particular colonies, or groups of colonies as will enable them to get the sense of movement, of progress, in history.

B Class.

Exploration and Colonization.

Text:—School History of the United States, Mace, pp. 1-117.

A Class.

The Struggle for North America.

The Struggle for the Rights of Englishmen.

The Struggle for the Rights of Man.

Text:—School History of the United States, Mace, pp. 117-198.

References:—Stories of the Great Republic, and Stories of the Thirteen Colonies, Guerber; Our Country's Story, Tappan.

EIGHTH GRADE

B Class.

The first half of the year begins with a study of certain conditions and tendencies in the colonial period which have a special bearing upon the governmental problems confronting the country

at the close of the Revolution. This study includes a rather careful examination of government of two or three of the colonies just prior to the revolt, the relations among the colonies and with England, and the development of the idea of union. This serves as a preparation for a study of the new state governments, of the confederation, and finally of the federal union. The development of the country under the Constitution to the first election of Lincoln, constitutes the main work of the half year.

Text:—History of the United States, Mace, pp. 198-337.

A Class.

The second half year begins with a review of the events leading up to the civil war. The advance covers the period from 1860 to the present time. Special attention is given to the political events of the war, to the progress of "reconstruction" after war, and to the problems growing out of that war, that still remain unsettled.

What is said above concerning the work of the seventh grade is also applicable here. The greater maturity of pupils of this grade enables them to do stronger work than heretofore; and the importance of the period requires it. The order of the text book is in general followed, but the matter found there is on many subjects insufficient for inquiring pupils. Other texts and larger books of reference are drawn upon, including some original material. Familiarity with the Constitution is gained by constant reference to it. Thus the composition of Congress and modes of election are best learned in connection with the organization of the new government under the constitution, the mode of electing a president is best studied in connection with those elections about which there is some peculiarity, e. g. that of 1800-1801, or 1824-1825. To understand the trouble over the "midnight appointments" it is necessary to make a brief study of the judicial system provided by the Constitution; and so on with the use of the treaty power, the admission of states, the acquisition of territory and the like.

After the ground has been covered in something like chronological order, various phases of history are taken up by way of review. Among the topics for such review are the following: The Territorial growth of the United States; growth of population; the various important tariffs; development of transportation; the slavery question; political party history and the admission of

states. Another useful form of review is found in the preparation of brief biographies to show the relation of the characters studied to the various movements of their times.

Text:—History of the United States, Mace, pp. 337-end.

References:—How to Study and Teach History, Hinsdale; Method in History, Mace; Pathfinder in American History, Gordy and Twitchell; Guide to the Study of American History, Channing and Hart; Report of the Committee of Ten, pp. 162-201; Report of the Committee of Fifteen, pp. 252-7; The Study of History in Schools, being the Report of the Committee of Seven, of the American Historical Association, especially pp. 158-172; The Teaching of History and Civics, Bourne, especially chapters v, ix, xviii and xix.

NATURE STUDY

The outlines for Nature Study published in the Manuals of 1903 and 1907 are still the basis of our work. No attempt is made to follow them in full in any of the grades, but from the list of topics the teachers select from time to time those which they can use in geography, in drawing, in language, and in stories. We give no definite separate period to Nature Study as such, yet in a quiet far-reaching way it has a strong influence upon our standpoint and upon the subject matter used in many periods.

See, especially, the geography work of Grades I, II, and IV, and note that every excursion is as truly Nature Study as it is Geography. Tho the third grade geography is of another character, every story there studied contains material which inspires a deeper love for all that is found on this great round ball we call **home**.

References:—Nature Study, Jackman; Systematic Science Teaching, Howe; Object Lessons, Longman; Nature Study and Life, Hodge; Nature Study and the Child, Scott; Object Lessons in Elementary Science, Vol. 1-3, V. T. Murche; Forestry of Minnesota, Greene; Minnesota Plant Life, McMillan; Handbook of Birds, F. M. Chapman; Practical Zoology, B. P. Colton; Outdoor Studies, Needham; Ants, Bees, and Wasps, Lubbock; Lessons in Plants, L. H. Bailey; Butterflies, S. H. Scudder; Botanical Series, Newell; Lessons in Botany, Gray; The Nature Study Idea, Bailey.

PHYSICAL EDUCATION

I. INTRODUCTION

If we define education as a training for life, a moment's reflection discloses physical education as the foundation of the whole structure. For the interdependence between the physical, mental, and moral natures is so close, and the boundaries so undefined, that exact separation seems impossible. Therefore while physical education is concerned primarily with the growth and development of the physical child, it is also the conditioning factor in all education, in that there must be physical completeness before we can hope for mental or moral completeness. Because educational authorities have re-awakened to these facts, physical education is again assuming its deserved importance among educational interests. But it comes now in a new aspect, for, while the physical is emphasized, and means are taken to secure physical growth and perfection, the latter are not regarded as ultimate ends. These lie, rather, in the mental and moral natures which we know are quickened through the physical, and which with the physical make the perfect whole human being.

With this view of the province of physical education we may make all of our efforts in this field center around the one thought,—health. The department might well be called the department of health. And yet we aim to get health, not merely for its own sake, but rather for that which it makes possible, and which is not found if health is lacking. For we define health as organic efficiency—the condition when the individual feels most capable of **doing** and **accomplishing**. It is then that his powers are most keen, his senses most responsive.

That man must **now** consciously strive for health is due to changes in his animal habits which have made it impossible to trust to anything but definite direction as a means of maintaining right conditions. To give these directions, and to furnish incentives and means for their realization in the life of each child, is the work of physical education. As a school factor, it first of all aims to make the school environment conducive to the health of the child. Careful attention is given to proper ventilation, lighting, heating, and sanitation of the school room. The school rooms are fitted with adjustable chairs and desks in order that there may be made a hygienic adaptation to the requirements of the individual child. The school program is carefully tested by physical requirements, periods of work alternating with periods of relaxation; heed is given to length of time spent upon each subject so that undue strain and fatigue may not occur; and recesses are provided for free and spontaneous play. In all ways, we aim to keep our school free from the possibility of the accusation that it is a menace to the life and health of the growing child.

But, as has been suggested, we teach *health* to the child rather than morbid physiology or scientific anatomy, which he neither understands nor is interested in. Health being mainly the practice of hygienic habits of daily living, we aim to impress upon the child certain maxims and principles which it should be his duty to cultivate and follow, that he may be stronger, better, and more capable of enjoying life and of doing things. This instruction is informal in method, there being no text below the eighth grade. The teacher, by suggestion and informal talk, correlates this with other interests and activities of the child, so that it becomes to him a real subject and part of his daily life.

The school, in taking the responsibility of educating the child, feels it should know just what material it is purposing to handle. It may be the child is not physically able to receive the instruction provided, in which case instruction is wasted and the child not only is not benefited, but may possibly be injured. A child afflicted with adenoids, defective sight or hearing, can receive only dulled and blurred impressions which cause the mistakes and blunders which have too often been set down to stupidity. By an individual biologic examination of each child, made upon his entrance into the school, a knowledge of his physical condition is obtained.

If from the tests made of eyes, ears, throat, and nasal passages, physical defects or abnormalities are found, parents are advised, that steps may be taken for the removal or alleviation of the same. In addition, there are recorded certain physical measurements indicative of the child's growth and development, and observations are made for round shoulders, flat chest, crooked spine, and bad posture. This work is in the hands of the director of physical education, acting with the assistance and advice of the school physician.

The last division in the field applies directly to the motor activities of the child. Thruout the elementary school he is passing thru stages of physical growth and development when movement is his body's main need, and the craving for it his foremost instinct. Action is the law of growth, and if denied or hampered, the organism is sure to suffer in some of its parts. It is frankly acknowledged that school, as an organization, lacks too entirely opportunities whereby the child can and ought to expend his motor energy. The gymnasium supplies in part this lack. Not only to satisfy hygienic requirements, but sound pedagogical reasoning as well, the work on the gymnasium floor is justified as forming a vital part in the education of the child — both in its subject matter and its method of presentation. Action is the child's first and, for some time, only form of expression. Ideas grow and strengthen only as they have opportunity to be expressed. In the nature of the activities steady progression is observed, corresponding to the developing changes in the child's physical and mental growth. The activities in the gymnasium are, for the most part, taken from the child's own world, closely allied to his interests and former experiences,— material which he already knows, can understand, and in which he can grow. Plays, games, and folk dances form a large part of the program. In the plays and games there is material which not only gives the child the needed opportunity to express and delight himself in movement, but also as supervised work in the hands of the instructor it is the means of developing such social, ethical, and intellectual qualities as are required to play a good game, and play it fair. The folk dance is of historic and cultural interest, representing a primitive form of expression still employed among certain foreign folk. This type of exercise conduces to grace of movement, and is delightful to the child, satisfying the dramatic instinct and love of rhythm.

It has seemed wise to retain certain formal exercises involving large movements of the trunk and limbs for hygienic and corrective reasons. These are graded as to difficulty in execution and amount of co-ordination required, involving steady progression. In the earlier grades, the movements are representative, so far as possible, of forms of life known to the child. Marching, varied in type as suited to the different grades, is used as valuable in maintaining correct posture in standing and walking, in drilling the body to answer quickly to command, and in satisfying an inherent sense for bodily rhythm.

While from the gymnasium activities strong neuro-muscular control develops, it is remembered that the gymnasium period is in part one of relaxation for the child, and close demands upon his nervous system as a form of training are avoided. Much of the work is done to the accompaniment of music, which contributes to the joyousness of action, and leads to the development of the æsthetic in the child.

In addition to the exercises already mentioned, there is some apparatus work, light in nature and carefully supervised to avoid all danger of strain and injury. Swimming is taught, not only as a valuable exercise for all round development, involving mental and moral as well as physical qualities, but because it is believed man should be master of his body in all environments — in water as well as on land.

After the sixth grade the boys and girls work in separate classes, which seems advisable because of the marked organic changes appearing at this time. There follows a general outline of the work in the grades.

Note. Because of the necessity for keeping the number of pupils evenly distributed, the school is this year divided into six divisions and the kindergarten, as follows:

Kindergarten.

First division, first and second grades.

Second " third and B fourth grades.

Third " A fourth and B fifth grades.

Fourth " A fifth and sixth grades.

Fifth " seventh grade.

Sixth " eighth grade and review class.

II. SUBJECT-MATTER

FIRST DIVISION

- a. **Marching.** This is informal in nature, with few commands and no attempt to force the child to keep time or step.
- b. **Free Hand Movements.** Large fundamental movements of the trunk and limbs are mainly involved. Forms of life and activities known to the child are imitated, thus keeping the work allied to his interests.
- c. **Games and Plays.** These occupy the largest part of the program. The games are in the main unorganized, non-competitive, and non-co-operative, appealing to the dramatic and imaginative interests, rather than calling for skill. The children run and jump for the mere pleasure of the activity, rather than for any outside end to be gained. Certain singing games and games set to music form an elementary exercise in rhythm preparatory to the later folk dances.

SECOND DIVISION

- a. **Marching.** Slight progression from work done in the first division — children are held to keeping step and gradually acquire the facings and easier movements. The marching is mainly in column form, correct posture being obtained by suggestion rather than direction.
- b. **Free Movements.** These are still recreative in nature, as in the first division — movements are used as suggested by the children, exercising creative instinct. Some apparatus work is introduced — light in nature, such as rope climbing and swinging.
- c. **Games and Folk Dances.** The games are more organized — certain rules and limitations in playing are observed. An opportunity is given for individual work, as in "Tag" and "Follow the Leader." Imitation is still a strong force. Particular care is taken to avoid fatigue. Simple folk dances are introduced.

THIRD DIVISION

- a. **Marching.** Graded introduction of step positions and figure formations, with closer insistence upon quick response.

- b. **Free Hand Movements.** Beginning to be more formal in nature, but still related to the child's other interests. Light work continued on such apparatus as the stall bars, rings, and ropes.
- c. **Games and Folk Dances.** An increase is made in amount of skill demanded, while there is less appeal to the dramatic and imitative instincts. Social games beginning to be introduced, games where there exists competition between groups.

FOURTH DIVISION

- a. **Marching.** Flank and column marching introduced. Rules given for good bearing in posture and walking.
- b. **Formal Gymnastics.** Apparatus work included; movements become more localized, and greater insistence is made upon correctness of execution. Attention is now paid to technique. An appeal is made to the child's reasoning powers to hold his interest in the exercises.
- c. **Games and Dances.** The group work is more highly organized. The child is encouraged to increase his skill in doing that which has become to him an apparent means for gaining a desired end. More rules and regulations govern the games to satisfy the child's rapidly growing reasoning powers. This seems a particularly apt time for the dance work, as the child has not yet come to his self-conscious period, while his dramatic instinct, which finds expression in the dance, is still with him.

FIFTH AND SIXTH DIVISIONS

A distinction is made in the nature of the work as adapted to the sexes, the boys and girls being in different classes.

- a. **Marching.** For the boys the type of marching is distinctly military in commands and formations. Quick bodily response as a mark of bodily control is enjoined. For the girls the marching consists rather of fancy steps and formations.
- b. **Formal Work and Gymnastics.** In the localized, definite movements which are used, there is required a closer co-ordination and finer exactitude of execution than in the earlier divisions. Movements are vigorous, but not long-sustained; as this is a period of easy fatigue for both boys and girls. Great care is observed in all exercises to avoid strain and over-taxing. As

it is a time of vital changes, the exercises are planned more particularly for hygienic and corrective purposes. Track work forms a feature for the boys particularly.

- c. **Games and Dances.** The games now involve specialized team work in which the individual is becoming subordinate to his group. Play has become a discipline to mind and body. Such qualities as self-control, unselfishness, obedience, and a sense of fairness have become the necessary qualifications for "playing the game." In the case of the girls, particularly, the element of competition is guarded lest it lead to serious mental or physical strain. For them the aim is rather wholesome fun derived from moderate exercise.

REVIEW CLASS

I. INTRODUCTION

The review class is primarily a class in which pupils of irregular grade preparation, but of some maturity are trained. Pupils holding eighth grade diplomas, who are unable to enter the normal department, and others capable of doing eighth grade work but not suited to forming a part of the regular eighth grade, are admitted to some section of this class. While, normally, a pupil is not required to enter the review class after he has finished the eighth grade of our elementary school, there are occasions when this is necessary, (1) when the immaturity of the pupil makes it advisable for him to do additional work for a period before his entrance to high school or the normal department, (2) when for one period of six weeks between the close of our half year in the elementary school and the beginning of the spring term in the normal department, we urge our eighth grade graduates to take the work of the review class rather than remain out of school until the opening of the spring term; and (3) since the High School has an entering class only in September, when our eighth grade pupils complete the work in mid-year, they are advised to form a special class organized for their accommodation, the work of which is adapted to their needs.

The time required for completing the work of the review class depends largely upon the nature of the previous preparation of the individual, the degree of his maturity, and his power to do independent thought-work. At the opening of each term in the normal department (once in three months), tests are given and pupils who show sufficient power of application and ability to do independent thinking are permitted to enter the normal department.

The work done in the review class varies widely in the different divisions of the grade, and from year to year, but is essentially a complete review of the subjects taught, with special emphasis upon

organization of subject matter, seeing of relative values and relations, and upon training in independent work. Accordingly, topical recitations, outline work, and reference readings are emphasized.

II. SUBJECT-MATTER

ARITHMETIC

The aim is to secure absolute accuracy, reasonable rapidity, thoughtful concentration, and general information. Proficiency in the use of the essential processes being necessary, not only because in business life a large majority of the problems involve them, but also because no satisfactory work in mathematics in the higher grades can be done without this foundation, the first work of the year is given to a careful, vigorous, thoro review of reading and writing numbers; addition, subtraction, multiplication, and division of integers, of common and decimal fractions; denominate numbers; mensuration; simple percentage and simple interest. Then topics of general informational value, including commercial discount, taxes, insurance, commission, stocks and bonds, banking, square root, and the metric system are studied.

Texts: Under advisement.

References: Committee of Ten, *Methods in Mathematics*, Dewey and McLellan, *Psychology of Number*, chap. XV, *Percentage*; McMurry, *Special Method in Arithmetic*; Smith, *Teaching of Elementary Mathematics*; Young, *The Teaching of Mathematics*.

GRAMMAR

In the study of grammar, thought analysis is made the basis in the belief that technical English has a place in the elementary school only so far as it assists in ready and clear interpretation of thought, or as it affords a working knowledge of the best usages of the language that becomes instrumental in securing correct and more effective spoken or written English. Careful attention is given to oral and written work incidental to all subjects. Where other work permits, a distinct class in composition is organized. Here a study is made of the paragraph and of the simpler forms of letter writing, narration, description, and argumentation. Story telling and memorizing of poems are encouraged.

Texts: Grammar, under advisement—See Part II. Composition, Gilbert and Harris.

References: Chubb, *The Teaching of English*; Carpenter, Baker, and Scott, *The Teaching of English*; Hinsdale, *Teaching of the Language Arts*; Buehler, *Practical Exercises in English*; Dyè, *Letters and Letter Writing*; Spaulding, *The Problem of Elementary Composition*.

At different periods of the year, according to the needs of the class, work may be given in geography, history, or civics, all of which are so closely connected that the work of each should reinforce that of the others.

GEOGRAPHY

The study of geography in this grade should have a **practical** value in the giving of information which every intelligent person should possess, a **sociological** value in showing the interdependence of men, and a **general** value in leading to the development of power in seeing relations and interpreting situations and facts. The work consists of a review of practically the whole subject. Much reference work is done.

Texts: Dodge and Tarr and McMurry.

References: McMurry, *Method of the Recitation*; Parker, *How to Teach Geography*; Arnold, *Waymarks for Teachers*; Geikie, *Teaching of Geography*; George, *The Relation of Geography and History*.

HISTORY

The chief objects emphasized in the study of history in this grade are training in seeing the proper relation of cause and effect; teaching of certain governmental principles; and developing appreciation of the worth of moral strength, of the labors of our ancestors, and their legacy to us. The work consists of a new view of the whole subject of American history and seeks to organize the material into large units.

Text: Mace's *History of United States*.

References: In addition to those given under General References; Harrison, *The Meaning of History*.

CIVICS

The work done in this subject is based upon the notion that all education should prepare the individual for community life. Accordingly, we give some understanding of the nature and meaning of life in a community and of the relation of the individual to it. Thruout the course ethical values are emphasized and the work is given as much local significance as seems wise. Much reference work is done.

Text: Dunn, *The Community and the Citizen*.

References: See preface to text regarding aim and method of course; Bourne, *Teaching of History and Civics*; Small and Vincent, *Study of Society*.

READING

In the reading work of this grade the aim is to gain power in understanding the thought of the printed page, to increase the vocabulary, to train the voice, and break up habits of slovenly and careless speech, to cultivate the emotional side of the pupil, and to develop a taste for good literature. Relatively more time is given to specifically intensive reading than to extensive work, while about half the time is used for such a combination of the two as the interests of the class seem to demand.

Texts: Masterpieces of American Literature; Shakespeare, *Julius Caesar* and *Merchant of Venice*; Lamb, *Tales from Shakespeare*; Eliot, *Silas Marner*; Scott, *Lady of the Lake*; Dickens, *Christmas Carol*; Hale, *Man without a Country*; etc.

References: Hinsdale, *Teaching the Language Arts*; McMurry, *Special Method in Literature and History*; McMurry's *Special Method in Reading of Complete English Classics*; Hueys' *Psychology of Reading*; Clark, *How to Teach Reading in Public Schools*; Arnold, *Reading, How to Teach It*; Chubb, *The Teaching of English*; Carpenter, Baker, and Scott, *The Teaching of English*.

SPELLING

Regular lessons are given in spelling. The lists are taken from the text books used and from actual mistakes in written work. Frequent dictation exercises, diacritical markings, and the use of words in sentences are important. Stress is laid upon the teaching of the spelling lesson.

PHYSIOLOGY

The prime motive in the teaching of this subject is the acquiring of knowledge necessary to the care and health of the human body. Accordingly, special attention is given to a study of foods, exercise, ventilation, and like topics.

Text: Hutchinson's Laws of Health.

MUSIC AND DRAWING

These subjects are taken with the eighth grade. the work being adapted to the needs of both divisions and much individual work being necessary.

PART II

LANGUAGE AND GRAMMAR

I. INTRODUCTION

A study of the aims of language work emphasizes the fact that it should seek to give expression to the child's experience as it actually is. Language work carries a magician's wand of three-fold power: it gives the child firm foothold from which he may take his next step upward; it throws the light of self-knowledge among the shadows of that chaotic self whence his personality struggles to emerge; it finds for him a voice which hastens his social birth and sets him with his fellows and of them, not merely among them. Each of the three is of vital import to the child's progress.

At almost any point in his development his power may be stunted by a growing disproportion between his experience and his expression. This disproportion may be comparatively harmless up to a certain limit; when that limit is reached it is paralyzing. Crudity of expression on one plane becomes crudity of thought on the next higher; one can think and feel somewhat in advance of his power of expression, but that distance is limited. Inadequate language development in early years thus works incalculable harm to later thought, but so subtly that it is often impossible to sift the induced from the native imbecility which makes barren the years of thought. Nor does the blighting effect of cramped expression desolate the narrow field of thought alone; its frost blackens a far wider and richer area of consciousness than that; delicate perceptions die away, fragile aspirations droop, yearnings toward the high fade to dull commonplace, for lack of developing expression. How many an appeal falls on deaf ears because the emotion that could have given it answer died of solitary confinement in an unexpressed childhood! How vainly do we build ideals as dwell-

ings for our youths when the feelings on which we must found them have never known greater substance than is given them by a surge of hazy emotion! How well for his later growth had they been defined, hardened, made usable, by embodiment in objective form! In thought and feeling alike the higher must find foothold in the lower; how needful then that each higher in its turn shall gain form and firmness for the sake of that higher still which looks to it for support. Language work gives substance to the child's new acquisitions; it is in this the handmaid of his progress.

This supplying of starting places for new reaches is not the only function of language work. The child knows his thought better after he has expressed it, much as he sees an object truer after he has drawn it. The scrutiny of his thought which precedes expression reveals new values, results before unseen, defects before unfelt; and he will as surely know his feeling in a new way when he has projected it in words. New lights and shades emerge as he studies to give it to another truly. He seizes his fluid experience and struggles to imprison it in words thru a bewildering variety of shapes, until, like the old man of the sea in the hero's clutch, it lies at last in his grasp in its true form. Nor is this all; self-knowledge is self-correction. Let him but learn the lineaments of his thought well enough to chisel out its likeness in words and he will straighten many a twist; let him learn the soul of his feeling well enough to breathe its life into words and he will strangle much that is ignoble and extravagant. Language work, then, leads him to know that mystery which is his self; and it is in this the handmaid of his betterment.

But the fullest worth of the individual comes not thru self-advance nor yet thru self-knowledge, but thru his touch with others. Sympathies, faiths, keep silence within us, dumb in the fear of distortion by a garb of unaccustomed words. If the worst were that clumsy expression merely concealed the thought, one might risk it; but it mocks at it. And who will see his deepest self don the fool's mask? Anything that will uncover these hidden values is of great worth; and the power to clothe the inner reality in clinging folds of wording which shall reveal its true outlines, makes actual, stores of potential worth within us. Language work seeks in this way to free the child's social energy; it is thus the handmaid of his social value.

This, then, is the triple aim of our language work: to crystallize, to illumine, to share, the child's true self. What bearing has it on the selection of subject matter? Its demand is obvious. The work must seek to give expression to the child as he is; **his** thought it must be, not his teacher's that he expresses; his feelings as they are, not as we wish they were; his language work must reflect his actual self, to-day as he is to-day, to-morrow as he then is. He will not be helped to think a step in advance by stumbling thru the organization of a thought that never was his, or grow rounded and sane in feeling, by an insincere effort to say what he never has felt; he will be no more at home in himself by rambling wordily afieid thru a content foreign to him; and efforts to handle words and forms for their own sake but bury deeper under habits of insincere speech the path from his inner self to revealing expression. A study of the aims of language work thus puts emphasis on our first practical maxim; **the subject matter of every lesson must be not only within the range of the child's experience, but actually present in it, when expression is demanded.**

Our second practical maxim flows from a study of the need met by expression. One speaks to be heard; this is set forth alike by the theory of speech and by the practice of the great masters who have enriched human life with noble literature. The only reason for writing at all is to share; this demands that the child be set the conscious task of arousing in another the perfect counterpart of his thought, feeling, experience. His paragraphing is tested by the way the subject lies in his own mind; his sentences by their skill in giving the content to another in its true relations, his words by the truth of the impressions created. Every rule good writing asks him to observe has been evolved by such striving and can be given him in response to his own sharp need. The content is the life; the form the outer garment, shaped by what it clothes. The outer but reflects the inner; the inner demands the outer. If, then, you would mould the child's expression, look to those forces which brought language into being; the vitality of the thing to be communicated and the creative necessity of sharing it. Thence is derived our second practical maxim: **Pressure for form must be exerted by the content thru a motive for sharing that content.**

The acceptance of these principles in theory brings us face to

face with the question of detail in practice. How shall we apply these maxims to the separate items of the technique of expression? We find two things essential to the successful using of the energy of the content: (1) There must be a variety of flexible language forms at the child's command, and (2) his language resources of word and form must be trained to respond not to the teacher's call for one form or another, but to the call of his own thought — of the thing he has to express. We try to work from within, out; to push the children to a new form by the impetus of the content, exacting a true image of itself. Words are multiplied in response to the child's need of expressing a sharply defined idea; punctuation becomes a means of showing his readers the adherences or separations of his thought; paragraphs mark its articulations; and varied sentence forms are forced upon him thru a content demanding their use.

The subtlety and complexity of language work makes the definiteness of purpose, essential in all teaching, especially imperative in the language hour. To insure definitely progressive work, the teacher must have a clear idea not only of what is to be accomplished in her own grade, but of its relation to what precedes and follows, and she must keep these three points of view ever in mind. To aid the teacher in obtaining an easy grasp of this triple task, an analysis of the development of each separate element of language-control — vocabulary, punctuation, paragraphing, sentence variety — is here set down to supplement the analysis of the work by grades which follows.

Vocabulary work runs thruout all the grades with more nearly even stress than does any other part of language work, yet it will be useful to note likenesses and differences. The one thing that is alike in all vocabulary work is that new words are given the child in response to a definite need. Wordstudy apart from actual use affects the child's reading vocabulary, but is of slight value elsewhere. Even to require him to put into a sentence words thus studied helps but little, for the sentence thus produced is the result of no real effort to share a thought; it is purely formal. From the first grade to the ninth, then, words are to be supplied when exigencies of writing or speaking demand them.

The differences in vocabulary work from grade to grade are the result of two distinct phases of the child's development:

(1) The child's experience continuously broadens and deepens. Children of all ages are word-poor; that is, they lack words to express experiences actually theirs. In all grades, then, direct naming of things, of their attributes, activities, and parts, of relations, of feelings, must be constantly carried on. In the earlier grades these can usually be supplied by the skilful teacher in connection with other work but from the third grade on whole lessons are occasionally needed for this purpose. Comparison of objects is useful here, e. g. an apple with an orange, 3rd grade, a peacock with a hen, 4th grade, the actions and postures of a listening Indian with those of a boy playing, (5th and 6th) Hawthorne's face with Carlyle's (7th and 8th). Construction work, **no matter in connection with what work it is carried on**, should also be utilized by the teacher with full realization of its language value. As soon as the child can grasp large and complex undertakings, descriptions of activities around him furnish the need for a host of new words. An example of this sort of work is a chronicle of the steps in the erection of some public building, with measurements, materials, processes, accurately given. Abstract ideas should be carefully examined, made definite, and supplied with a vocabulary, as they appear in a child's thought life. This work assumes growing importance from the sixth grade on. The child should be guarded, on the one hand, against the fatal habit of being willing to say things in recitation which have no meaning to him, and, on the other, against the danger of losing his grasp on an idea for lack of a word to pin to. The thing to be insisted on in all this word collecting is that the words supplied be those called for by the child's experience. A long word is as good as a short one, an abstract one as a concrete one, if the child has real use for it.

(2) The child grows from the desire to use language as mere self-expression into the desire to use language as a tool in his social life.

Both sorts of speech are present in every grade and should be differently handled. The prime thing for the teacher to secure in self-expressive speech is spontaneity; the prime thing to be obtained in social speech is clearness — not dry-as-dust dictionary correctness, but accuracy in creating the exact impression desired, whether on intellect, feeling, or both. Spontaneity is secured through in-

terest, much unhampered practice, and stimulation of the imagination; clearness thru the habit of measuring the effect of what one says on his hearers.

In the earlier grades much opportunity for the free play of the language instinct is offered. Words are supplied steadily but as unobtrusively as possible. There is little attempt to make the child critical of his language; the thing desired is to have his thought run freely, to exercise his spontaneity, and keep it full and fresh. Examples of exercises for this purpose are the free retelling of stories which have interested the child, unhampered accounts of adventures and pleasures, and purely imaginative work, in which not even the check of fact is put on the child's flow of language. In the first two grades this last exercise may well take the form of make believe dreams. The children may close their eyes for a short time, to let the play of imagination go on unchecked, and then tell whatever riot of ideas took place in their minds. Third, fourth, and fifth grades like imaginative stories, either without any starting point, or starting from a picture, a proverb, or a half-told story. Sixth, seventh, and eighth grades enjoy, in addition, the writing of plays and stories which develop favorite episodes or dramatic situations, suggested by their other studies. Some opportunity for the free working out in language of the child's imaginative life must be carefully provided for in every grade. In all this work words are to be supplied generously but quietly by the teacher.

Even in the lower grades, however, the teacher must be ever watchful to mould the social speech which the child is already using, and when opportunity arises, **whether it be in the language hour, in another lesson, or in play hours**, it should be met by using the social situation to help the child get the effective wording. Examples of this incidental work are (1) the assumed misunderstanding of an inaccurately worded question or statement, or of obscure directions for playing a game in which the teacher joins the children; and (2) the writing of invitations to some school function, in which time and place must be made clear. In the third grade the social motive is applied to whole series of lessons, e. g., the class may together prepare a story or present a dramatization. But while the work as a whole is now consciously directed toward affecting others, and is thus a basis for later self-critical word-

study, there is no conscious choice of words, no examination of the effectiveness of this word as compared with that. In the fourth and fifth grades some **beginnings** are made in selecting words with a social purpose, an example of which is the following: Let each child be given a short story to read and retell to the class. Let him decide where the most interesting point is, and how he wishes to make the class feel at that point. Let him then make a list of words which he thinks will be useful in creating that impression. The stories must, of course, be new to the class. In the sixth grade this discrimination between words becomes a conscious matter, and much discussion and testing of the effect of a word or combination of words opens the way to a large increase of discriminated words. This work is now given more and more emphasis in the language period, — the free expression of the child's personality being incidentally, but **therefore all the more carefully**, provided for elsewhere. Along with this subjective testing of word values by the child's own meaning, is carried the testing of them by external facts — in such exercises as the above mentioned record of the new building's progress. In the seventh and eighth grades the critical attitude toward words has become more nearly a settled interest; and it is carried into the vocabulary of such relations as are used in history, geography, etc. Such work, however, must not exclude more vivid and concrete work in word study, which is needed in the higher grades as well as in the lower.

Paragraphing has for its object to make it easy for the reader to grasp the relations of the parts of the writer's thought. Profitable work in paragraphing, then, obviously presupposes two things in the child; a conscious social purpose in his writing, and the ability to detect the relations of his own thought. These two requisites for the effective study of even the simplest paragraphing are reasonably well developed by the time the average child reaches the sixth grade and it is therefore in the sixth grade that we introduce the study of paragraphing and develop the paragraph sense. It is important that definite instruction in paragraphing be left to the grade to which it is assigned; but the necessary preparatory work should be clearly understood by teachers of the grades below, and carefully done.

(1) The child should come to his work in paragraphing with the habit of considering his hearers. The gradual transfer of em-

phasis in the language work, from satisfaction in expression for its own sake, to criticism of it for the sake of others, has been already pointed out. Every teacher should be conscious of just how far this change has gone in each child, and should see that each tendency is properly developed.

(2) To analyze his own thought the child must have (a) a sense of it as a whole, and (b) a sense of relations between its parts. He should come to his study of the paragraph with these appreciations well developed. Even in the first and second grades work should be done to make the child realize when he has finished his story, explanation, or dream. In the third grade the fact that what he says has a beginning and an end should be brought into consciousness; he should learn to consider the beginning and to round off the end. Here, too, the child should begin to strive for continuity of thought in his stories, keeping the order of events with conscious care. This is the beginning of a sense of the relation of the parts to each other and to the whole. In the fourth and fifth grades the child may even begin to receive much of his subject matter with some attention to its organization — e. g., he may be provided with an outline of the stories told in history and geography, and follow the topics as they are presented; but he should not attempt outlining himself except as in planning for recitations and story telling he may find it useful to jot down points he wishes to cover, for reference. He should be encouraged to plan what he wishes to say first, what second, etc., and even to select the most dramatic points of his stories for special emphasis, as has been already suggested in connection with word-study. This is, of course, loose thought organization, and is easily followed by the definite paragraph study in the sixth grade, as described in the course of study. The seventh and eighth grades, must foster and refine the paragraph sense by constant care in holding the child to organization of his recitations, and by occasional lessons following the methods used in the original development of the subject.

Sentence Study simply carries the study of thought-organization into a smaller unit, hence all the work preparatory to the study of the paragraph is preparatory to this work. In addition, a sentence has a certain total effect; it is flowing, crisp, suggestive of

joy, or of sorrow, etc., in the mere sound of it. The child must learn to use this sound effect of a sentence to reinforce the meaning gathered from its words.

Analysis shows that this total effect is largely a matter of musical elements, alliterations, rhythms, vowel quantities, etc. It is not desirable that the child consciously attend to these matters at any period in the grades, but the teachers of all grades should understand them clearly, and see to it that the child's ear is trained to catch the effect, though he does not analyze its causes.

Reading of poetry and beautiful prose, searching for the way of saying things which will make a dramatization the most effective, writing simple poems in grades where such work is profitable for other reasons, are valuable in such training. Moreover, since to change a sentence form is always to change its musical qualities, all work which multiplies the number of ways a child may say a thing, helps prepare him for his sentence work. As early as the third grade it is profitable to devote an occasional lesson to drill in varying the form of a sentence-element; e. g., — the color of the apple, the apple's color. As the vocabulary work becomes more critical, it merges by insensible degrees into the sentence work, since the place of a word in the sentence is often more important in determining values than is the word chosen. Often, too, the vocabulary work deals with phrases and clauses instead of single words, thus involving the whole sentence.

Punctuation should be taught as an integral part of written expression; as a tool to make the written work easy to read. This means that only the simplest problems in punctuation should be handled in the lower grades. The capital and period should be given with the first written work; but it is to be noticed that since the constant correct use of the period means that a child is conscious of the thought as a separate unit, it is not a matter of discouragement if he is slow to master it. We must expect both the backward child and the child of very rich experience to be slow to become perfect in this matter. A good drill in helping children to feel the limits of a sentence is to read interesting stories, having them make some sign when the sentence-end is reached. Quotations may be drilled upon in the same manner. Commas are not much needed before the fifth and sixth grades, when their use re-

quires some drill, being presented always as a means of marking off units of thought or of preventing misapprehensions. Paragraph indentation should be handled as one sort of punctuation, since its purpose is just that of the punctuation marks.

The apportionment of subject matter among our grades is controlled by the principles set forth above. If effective language work is to reflect the child as he actually is, it is manifestly useless to give him any technical work which the kind of content composing his real self does not require for its embodiment in words. There is no value for him in a given list of words before his content demands them, or in punctuation in advance of the needs of his own thought, or in paragraphing before his thought begins to take on articulations. Our present apportionment we believe to be sound in its large divisions and we are testing its every detail with earnest watchfulness. Readjustments of detail will be made wherever and whenever practical work shows they are needed, and there will always be elasticity in our course, that each teacher may fit his work to the personnel of the class he is handling.

The work which fills the language hour in the first and second divisions can not always be called language work, if language work be defined as direct effort to improve the technique of expression in words; but as a preparation for later more technical work it is most essential. All our language work falls under two heads:

Work to bring to usable definiteness the child's experience.

It is not always in words that expression is reached. At first the teacher is often satisfied if the content can be made definite enough to be expressed vividly in gesture or in the more complex action of dramatization; or in line and color thru pictures; or in form thru plastic material; or in rhythm and melody thru song. As the child advances, words gradually become the chosen medium of expression in the language hour until by the time he has entered the fourth or fifth grade the various forms of expression are being trained separately. The language teacher should never forget, however, that the sister studies of dramatization, drawing, music and illustrative manual work may be called in at any time help is needed in making the child's content definite and vivid.

Work to form literary likings and habits. The child finds in literature the great store house from which he can gather beautiful words and forms. He cannot too early begin his training in

sensitiveness to its harmonies and proportions by continual contact with it. The literature given him must be beautiful in form, but must deal with the ideas and interests of his own world. Just as truly as literature beyond the scope of his nature is powerless as a formative influence on his character, it is useless as a formative influence on his expression. He will not absorb beautiful forms unless they clothe ideas for which he seeks expression.

II. SUBJECT MATTER

FIRST DIVISION

Make definite the child's direct experience, interests, opinions, observations thru

- a. Conversations dealing with familiar, seasonable, and popular topics, suggested by special days, passing objects and events of popular interest, games, home occupations, pets, etc.
- b. Free accounts of experiences, fancies; descriptions of things of interest. Stir the child to amuse his mates with a funny story, or to interest them with an exciting one, or to furnish helpful information.
- c. Reproduction of experiences and objects of interest in color, clay, etc.
- d. Letters to mothers, to absent school mates, to Santa Claus, etc.
- e. Daily record of the weather.

Make definite the wider experiences offered thru songs, poems and stories by means of conversations, oral reproductions, dramatization, illustration thru clay modeling, sand table work, drawing, painting, paper cutting, and construction.

NOTE: Teach capitalization, use of the period, interrogation point, exclamation point, quotation marks, and a simple letter heading and closing as needed.

Train the children toward literary taste thru stories clothed in literary form by the teller, and thru poems, memorized exactly.

Suggestive list of stories and poems.

Jack and Jill, Little Boy Blue, Baa Baa Black Sheep, Humpty Dumpty, Little Bo Peep, Hickory Dickory Dock, Mother Goose; A Good Play, My Shadow, Happy Thought, The Wind, The Swing, Winter Time, My Ship and I, Autumn Fires. Stev-

enson; The Tree, Bjornson; Seven Times One, Jean Ingelow; The Wind, Christmas Carol, Christina Rossetti; Winter, Tennyson; Ariel's Song, Shakespeare; The Baby, George Macdonald; Lines Written in March, Wordsworth; Hiawatha's Childhood, Hiawatha's Sailing, Longfellow.

Suggestive list of stories for adaptation.

Little Red Riding Hood, The Elves and the Shoemaker, Grimm; The Ugly Duckling, The Little Match Girl, Anderson; The Three Bears, The Three Pigs, Jacobs; The Story of the First Woodpecker, Why the Swallow's Tail is Forked, Why the Rabbit is Timid, Florence Holbrook; The Childhood of Ji-Shib, A. E. Jenks; The Pomegranate Seeds, The Golden Touch, The Miraculous Pitcher, The Paradise of Children, Hawthorne; The Vision of Dante, Cedric, Elizabeth Harrison; Raggylug, Thompson-Seaton; The Pig Brother, The Great Feast, Laura E. Richards; The Mouse and the Moonbeam, The Coming of the Prince, Eugene Field.

References:—

How to Tell Stories to Children, Sara Cone Bryant; Text Book of Art Education, (for modeling subjects, etc.); Teachers' College Record, January 1906, Discussion of Literature, p. 59; In the Child's World, Emilie Poulsson; Three Years with the Poets, Bertha Hazard; For the Children's Hour, Bailey & Lewis.

SECOND DIVISION

The same outline as for the first division is used, with the necessary additions due to the widening of the children's experience thru the study of geography, history, and pictures.

The oral work is kept in excess of written; original poems and songs, and written reproductions are called for. In this division the emphasis is placed on arrangement and completeness of thought. Habits of correct speech are formed, and errors are corrected, when necessary, thru definite exercises and games which give drill, as e. g. on irregular verbs.

Suggestive list of poems and stories arranged in the order of the seasons.

Fall.

September, Helen Hunt Jackson; The Kitten and the

Falling Leaves, Wordsworth; Little Orphant Annie, James W. Riley; The Huskers, Whittier; Stories of the Pilgrims — to be adapted by the teacher from (1) Colonial Children, Pratt; (2) History of Plymouth Plantation, Governor Bradford; (3) Pilgrims and Puritans, Nina Moore.

Winter.

Everywhere Christmas, Brooks; While S h e p h e r d s Watched, Margaret Deland; Why Do Bells for Christmas Ring, Eugene Field; 'Twas the Night Before Christmas, Moore; Christmas Bells, H. W. Longfellow; The Old Bell, Andrea Hofer; The Sparrows, Celia Thaxter; Piccola, Celia Thaxter; Story of Christmas in England — to be adapted by the teacher from Washington Irving's description of same; Tiny Tim, Dickens — adapted by Ella B. Keck; The First Snowfall, Lowell; Little Red Riding Hood, Whittier; Lincoln Stories — to be adapted by the teacher from (1) Abraham Lincoln, Baldwin; (2) Lincoln in Story, Silas G. Pratt; George Washington Stories — to be adapted by the teacher from "George Washington," Horace E. Scudder.

Spring.

The Robin, The Wind Flower, Lucy Larcom; The Scarecrow, Celia Thaxter.

Suggestive list of books which contain excellent stories.

Uncle Remus, Joel C. Harris; Wagner Opera Stories, Grace E. Barber; Just So Stories, Kipling; Jungle Stories, Books I and II, Kipling; Lobo, Rag, and Vixen, Ernest Seaton-Thompson; Story Hour, Kate Douglas Wiggin; Bible Stories, Richard Moulton; Fairy Tales — Indian, Joseph Jacobs.

References for suggestions as to method and inspiration to the teachers.

How to Tell Stories to Children, Sara Cone Bryant; Value of Hero Stories, Helen Ford Staples; The Dramatic in Education, El. Sch. T'r, Vol. IV.

THIRD DIVISION

The work in the third division differs from that in the earlier divisions rather in proportion than in spirit. The chief aim of the

work is still to bring definiteness and reality to the child's content and nurture the impulse to share his real interests freely.

We continue to use (1) free accounts of experiences, fancies; discussions of ideals and opinions; descriptions of objects, places of interest, etc.; explanations of games and other activities. (2) Illustrative stories, by both teacher and child. (3) Written accounts of familiar or interesting objects, events, etc. (4) Poems concerning matters of vital interest and pleasure to the child. (5) Letters to absent mates, invitations and acceptances which are actually sent, requests for folders, or other information of use in other studies, etc.

FOURTH DIVISION

In the fourth division the child's need of sharing exactly his interests opens the way to formal (though never mechanical) work. Here he begins to gather his history and geography from organized texts, and to think with some rough groupings and sense of relations, and therefore the foundation topic of the language work is the paragraph. The increasing complexity of the child's thought calls for more careful punctuation in his written expression, and study is made of the use of the comma, and of the semi-colon in individual cases. The child's stock of ideas and interests is also so enriched that continual effort must be expended on giving him needed words to keep pace with it. Vocabulary work, therefore, assumes great importance.

In this work on paragraphing, punctuation, and vocabulary we use (1) The child's own experiences — the things that are of real interest to the child; games, contests, excursions planned for and enjoyed in common by the class; information which part possess and the others are really desirous of; discussions of matters to be decided by the class for a real event; letters to be sent to real people. All subjects should lend themselves to easy organization along large lines. (2) The wider experiences the school brings him — reproductions, and cuttings of literature, organization and discussions of the subject matter of his other studies. (3) Creative imagination — problems to be worked out thru imaginary scenes, situations, actions, stories explanatory of pictures, scenes in far

countries, to be constructed from material supplied in the geography lessons, narrations expanding events touched upon briefly in the history and literature lessons.

Paragraphing: See that to the child paragraphing is a matter of real thought division not of external form. The teacher must constantly guard against two things: she must not try to induce a complexity of organization natural to her, but beyond the power of the child; and she must not insist on her own organization, even on large lines. The child can think only in large divisions; if she tries to refine his paragraphing he will feel each separate thought or fact by itself which is the very reverse of the organization she seeks to induce. He must be permitted to reflect his own divisions in order that his own power to organize may grow. He will not gain individual power by being told where to indent. Class discussion over the paragraphing is very valuable, as the children's minds are nearly on the same plane and they can therefore give and take organization from each other effectively. The following exercises are suggestive of the general method to be followed in working on the child's paragraph instinct:

1. Let the class read together the advance history lesson, deciding on the "big thought" of the whole lesson and of each paragraph in the lesson. Place the topics on the board, and have the recitations made from it next day. Great stress should be laid in recitation on strict adherence to topic, on the one hand, and on completeness of any topic, on the other. Later, the whole lesson may be re-grouped around a new focus; this should not be done until the children readily grasp the leading thought of clearly paragraphed text.

2. Let the class find new titles for the reading lesson. Test each suggested title by examination of the lesson, paragraph by paragraph, condensing each to a single statement.

3. Give the children hectographed sheets, containing poems or prose units without indentation. Let them give a title and indent according to the thought divisions. Study the author's paragraphing of the same, with free discussion. The author may not have made the only possible grouping. For this should be used material clearly falling into large divisions.

4. Study objects for description, narration and such simple argument as the children use, and have the class settle on two or

three large divisions; then examine detail of description and note which division claims each. Do not complete an intricate outline for them to follow.

5. Put before the children a broad topic clearly organized, and let them choose stories from any part of it. Hold the story in its place in the organization by constant references to the whole as it is told. Put the outline on the board at first. Later make sure that they hold it mentally, e. g.

Why I like my summer camp.

I. It is interesting.

A. Fun on land.

(1) Picnics

(2) Plays

(3) Stories around the bonfire.

B. Fun on the water.

(1) Sailing

(1) At camp.

(2) On a cruise. (2nd story chosen.)

(2) Bathing.

(1) Games in the water.

(2) Tricks played on each other. (1st story chosen.)

(3) Practice which is valuable.

II. It is beautiful.

A. The island.

(1) Trees

(2) Wild flowers. (3rd story chosen.)

(3) Tents

(4) Wild animals. (4th story chosen.)

B. The waters.

(1) Our bay

(2) The channel

(3) Other island camps.

6. Undertake a joint enterprise; a play, a picnic, an entertainment, the construction of needed apparatus. Make the plans in full, and carry them out with constant reference to the whole. This requires the children to think the organization of the whole on what ever detail they are working.

When the children do actually organize their material in

large divisions, it will yet be necessary to **drill** them on indentation to reflect the same. The important thing in this drill, as in all formal work, is that the indentation be kept before them always as a sign of a thing that actually exists in their own minds, not as a thing of value in itself. For example, let a child who has written on "The Adventures of One Day," hold his paper before the class for inspection, with the question: "How many adventures?" If the reading of the story does not corroborate the decision the class made from his indentations, he must remodel his work. Or let a child place his list of large topics on the board, and challenge others to find any topic in his paper by inspection. In more advanced work let him read a sentence and challenge others to point to its place by noting under what topic it should occur. If the one challenged misplaces it he loses; but if he can prove that it should have been under the topic he chose, the reader loses. Children preparing work with such a game in view organize their work with eager care. Numerous variations of such exercises will occur to any teacher working along thought lines.

Punctuation: Keep up a steady pressure for the correct use of the period, interrogation and exclamation points, capitals, and quotation marks. All members of the class should begin to use the comma intelligently; to separate the word of address from the rest of the sentence, to separate words in a series, to separate explanatory phrases from the rest of the sentence. An occasional class discussion as to the ways to bring out meanings should be added to constant suggestive questioning of individuals. A few children will begin to need the semi-colon; supply it individually. The following exercises may serve as an example of drill work in punctuation:

(1) Read a selection with short sentences to the class. Have the pupils count the number of sentences read. This helps to build up the idea of a sentence unit, and teaches the use of the period.

(2) Read to the class sentences containing words in a series, such as, The grocer sells tea, coffee, sugar, cookies, and flour. How many things does he sell?

Similar sentences are written on the board and the class is required to separate the different things from each other. Make the need for the commas felt, before drilling on their use.

Vocabulary: Watch every opportunity to enrich the child's

store of forcible words. Whole lessons will be required to be devoted entirely to word gathering. Once get the children eager to express a definite idea and they absorb new words which will aid them therein, very rapidly. In general the best source for new words is the class. Whenever a need for words is felt, make a class list; it is astonishing how rich is the combined vocabulary of a class whose individual members are word-poor. The teacher may add such as she desires them to add to their stock; but they take from each other most readily. It is valuable to read some bit of literature gemmed with the sort of words they will need, just before the task in composition is set them. The main thing is to give them their new words in response to a definite need; this makes them available for expression. For the most part it will be found that sufficient opportunity for word-drill occurs thus in connection with other lines of progress, but there are times when whole lessons are needed for vocabulary work. Then the thing to be expressed should be very definite and stimulating, and, very often, should be present for comparison. Take a good copy of Rosa Bonheur's *Lion*, and try to get words describing the expression; or mount a milkweed stalk and set the children trying to picture it in words; examine a winged Mercury, and the children's vocabulary will multiply in certain directions, wonderfully; compete to see who can, with a limited number of words make a fire brightest, a sunset most delicate, a man angriest, a curve most graceful, a boy most courageous, a mountain ruggedest and so on. This sort of work should be less frequent than exercises where extravagance is checked by the presence of the thing described, but it is most valuable in multiplying new words. The surroundings and interests of any class will furnish a thoughtful teacher with innumerable openings for such exercises.

FIFTH DIVISION

The fifth division carries the paragraphing, punctuation and word-study to finer distinctions, following the evolution of the child's content, but a new work is to be definitely begun. The child's thought is by this time highly complex, and is also frequently compounded in all of the four relations (copulative, adversative, casual, alternative), but his expression is apt to be stiff and there-

fore false to his content for lack of flexible sentence form. The foundation of the language work in the fifth division is therefore sentence study.

Paragraphing: Keep up a steady pressure for intelligent paragraphing. Study the work in the fourth division and apply the same methods in reviews, stories, and discussion. To hold the class to the performance of its best in paragraph form, will require that the teacher bear the principles of paragraph work in mind in all presentations and discussions, rather than that much definite paragraph work be done in class.

Punctuation: Keep up a steady pressure for the correct use of the period, exclamation and interrogation points, comma, capitals and quotation marks. Occasional class discussion of a passage will be valuable in encouraging individual and intelligent punctuation, but do most of it by suggestive questioning of individuals as to the meaning of poorly punctuated passages. Watch to see which children really need the semi-colon.

Vocabulary: See fourth division.

Sentence work: Work definitely to make the child's sentence form flexible and responsive.

(a) Do definite work for each variety of the complex sentence in turn; introduce clauses of time thru a narrative demanding them; clauses of place thru description demanding correlation in space; clauses of cause, manner, degree, concession and so on, in like manner, thru the pressure of a subject matter exacting them. Most of the constructions of the simple sentence will evolve along with these. Make the primary pressure not for a given form, but for the expression of an idea which finds that form useful. Thus every set of lessons will develop not the one form aimed at, but a group of parallel constructions interchangeably useful in expressing the sort of thought relationship which furnishes the pressure.

(b) Attack the compound sentence thru its adversative form; begin by sharpening the child's sense of contrast, and rousing his perception of the contradictory elements in things about him and of the co-existence of contradictory facts. When he is sensitive to contrast he will be easily goaded into using the various forms of the adversative sentence by the exactions of a content filled with these contradictory elements. Use the same method to exercise him in compounding sentences copulatively, casually, and alternatively.

(c) Do continual work in sentence response. The aim of this work is to give the child instinctive skill in adapting his form to his thought. Its object is flexibility; it seeks to render the forms in his possession mobile and swiftly obedient.

For drill and review use:

- (a) Cuttings of bits of literature too long to be presented to the class as a whole.
- (b) Expansions of scenes left weak or obscure in literature in which the children are thoroly interested.
- (c) Organizations, expansions, discussions from the subject matter of other studies.
- (d) Literary entertainments offered to another class, using lately acquired material as subject matter: e. g. India; The first year of the Revolution, etc. The children discover dramatic and stimulating elements in such subjects unsuspected by them until they attempt to make it interesting to another class.

SIXTH DIVISION

No outline can at present be given since the work in the sixth division is being reconstructed and tested. The two objects in view are:

- (1) Introduction of simple work in thought analysis.
- (2) Selection of what is felt to be essential to any real mastery of language. In technical grammar much that is interesting and not without value is being sacrificed to what seems relatively most important. By this means we hope to make our work real.

The series of lessons now being tested in the seventh and eighth grades we hope will result in a distinct contribution to the teaching of language and grammar. An outline of the subject matter covered with a description of each lesson as actually taught, is in preparation.

Finding that work in both grammar and composition in the review class burdens the child, we at present omit grammar in that grade for we believe composition to be the more helpful of the two in aiding the child to get control of his mental life.

LITERATURE AND READING

I. INTRODUCTION

Because literature and reading are so closely related and because space is so limited, it has seemed best to treat these two subjects together even though something might be gained by giving each a separate treatment.

Literature as a school subject consists in teaching children to appreciate the meaning of what they hear and read. Reading consists in teaching children to get meaning from written or printed language and to communicate this meaning to others in the words of the author. A start in each of these should precede school life. Literature should begin for the child in his hearing and enjoying good stories told to him; reading should begin in his looking at the painted page while stories are being read to him. If the home life or kindergarten does not give the children plenty of stories in both of these ways, the first school problem is to supply this lack, because, without this foundation, progress in literature and in reading will be much delayed if not perverted.

These two subjects should be taught daily in school work, placing an emphasis on the one or on the other according to the needs of the class or of individuals. Learning to read should have a place in the program in every grade, more and more difficult matter being chosen from year to year.

Reading, as suggested in the definition given above, is of two kinds, silent and expressive. These differ chiefly in the emphasis which each places on the different processes involved in reading. Silent reading emphasizes those processes which are more directly concerned in **getting the meaning** of what is read, while expressive reading brings into prominence those processes by which the meaning of what is read is **communicated to others** in the words of the author. Silent reading presents two varieties; reading to acquire a knowledge of facts and reading to appreciate values. Reading for facts has a proper place in school work, and it should gradually be

introduced as the children develop the power to discriminate between fact and fancy. But reading to appreciate is the more important in elementary school work. If the material read has real literary worth then the reading lesson is at the same time a lesson in literature. Expressive reading presents three chief varieties: (1) natural, (2) artificial, (3) purposive. Expressive reading is natural when the forms of expression arise without conscious direction on the part of the reader. It is artificial, or mechanical, when the reader decides what forms of expression he will use and then produces these forms consciously. It is purposive when the reader devotes his powers of thought and expression to the securing of some result in the minds of others.

Reading for meaning is the great problem in the reading lesson in the early grades. To test the success of a child in getting the meaning he should be required to give in his own words an accurate and full account of what he has read and what it means, and sometimes to act out the thought. In this way a foundation may be laid for expressive reading. Story telling and reciting should also be prominent in early school work, both because of their own value and because they complete the foundation for expressive reading. The time to begin definite work in expressive reading is when the children can keep the meaning and the forms of thought clearly before their minds and at the same time express the meaning in the words of another. The teacher's criterion should now be the adequacy with which the children communicate their meanings to others rather than the closeness of their conformity to the words of the author. As the children grow older a closer conformity should be required.

The separation of the lesson in expressive reading from that in silent reading is very important. The success of each depends upon its having, for the time being, full swing in the mind. One strong reason for this separation is because more difficult matter should be used in silent reading than can be successfully handled in expressive reading.

To teach silent reading and literature the teacher needs (1) a wide range of experience in interpreting and appreciating good literature and (2) a thoro knowledge of the pedagogy of reading and literature.

To teach expressive reading the teacher needs to know: (1)

what forms of expression should be most approved; (2) what forms of mental action correspond to the approved forms of expression; (3) how the experiences of the children may be so controlled as to secure these best forms of thought and expression. (1) The best forms of expression are those which most fully and effectively reveal the child's meaning. There is no external system of forms to which the child must conform in his expression. (2) The best forms of mental action are those which are suggested by extracts from good literature when chosen with reference to the stage of development of the children. (3) The best ways of controlling the child's experience are the following: a. By securing good work in silent reading, i. e., by helping the child to get full, deep and stirring meanings from what he reads. b. By giving the child a social situation which invites his best efforts, i. e., setting him the problem of securing some important result in the minds of those present. c. By making suggestions to help the children in using the different methods of learning as applied to expressive reading.

A mind full of thought and a good social situation are both indispensable to good expression but not adequate to the best results. The teacher must suggest good methods of perfecting the expression.

What is needed in the pedagogy of reading is (1) a psychology giving a detailed treatment of the processes involved in reading and in learning to read, (2) a full and accurate statement of the stages of development in learning to read, (3) a list of carefully selected extracts from good literature adapted to each of these stages, and (4) an adequate report on the methods which teachers may use in teaching reading. A good beginning has been made in the first of these by E. B. Huey in his *Psychology and Pedagogy of Reading*, and in the third by C. W. Emerson in his *Evolution of Expression*. For the other two no satisfactory references can be given.

The psychology of reading offers many conclusions, of which the more important for the teacher of reading are the following:

1. The eyes move from left to right in a series of short, quick movements and pauses.

2. There are from three to six pauses in a line of ordinary length.
3. The mind does its perceiving during the pauses.
4. The units in perceiving are neither the letters, the syllables, nor the words, but about ten letter spaces.
5. Perception in reading depends upon slight visual cues (dominant letters usually) and it pays little attention to the division of the language into words.
6. The mind completes its perception of the language by an apperceptive filling out of the words and phrases suggested by the visual and vocal cues.
7. Short words can be perceived as rapidly as single letters and short sentences require only a very little more time than single words.
8. The reading unit is the sentence or the whole thought expressed by the sentence.
9. Cases of perceiving letter by letter or word by word are due to habits formed in learning to read.
10. Internal speech is a constant factor in all reading for nearly all persons.
11. This inner speech is usually simpler and more rapid than reading aloud.
12. The division of speech into syllables and words is artificial.
13. The sounds used in speech can not usually be given in isolation.
14. A sentence is not merely the pronunciation of its words.
15. The meaning of what is read is secured by the association of ideas as determined by the visual and vocal cues and by the context.
16. In good reading the attention is not directed to the letters or the words but it is given now to one thing and now to another in a way that is not yet understood.
17. Many extraneous and accidental associations form when words are perceived out of context.
18. The mental images which form as one reads are variable and fluctuating.
19. The only thing which remains constant in re-reading a passage is the core of the meaning.

20. Rapid reading is favorable both for apprehension and for retention.
21. Some persons read four times as fast as others.
22. A rhythmic movement is favorable for reading.

The chief stages of development in learning to read may be named as follows:

- | | |
|--------------|------------------|
| 1. Instinct | 4. Dramatization |
| 2. Imitation | 5. Thought |
| 3. Volition | 6. Purpose. |

Each of these terms may be used again to name the method which is most prominent in that stage.

1. Instinct. In this stage the child reacts instinctively to the books in his environment. He looks at the pictures and frequently thru curiosity he wants to know what the language says. Gradually associations form between the meaning of the pictures and the printed words and also between these words and what others tell him the words mean. In this way he may gradually learn to read.

2. Imitation. The instinct of imitation becomes prominent in this stage. The child unconsciously imitates what others do when they are reading silently or aloud in his presence. If he has frequent opportunity to look on the page as others read aloud he soon learns to know what story is on each page. Gradually he learns to recognize parts of the pages as corresponding to parts of the story and later to know what sentences and words mean. Then his instinct of imitation which has now become a habit leads him to try to read what he has not heard read. He will succeed in this as soon as he can recognize enough words and phrases to make sense when they come together in his mind. This method asks that many good copies be given him so that he may acquire good forms of expression.

3. Volition. What characterizes this stage is that the child consciously decides what he is going to do and how he is going to do it. Two tendencies arise; one for him to go thru a merely formal exercise giving close attention to spelling or to pronunciation, and the other for him to keep the meaning in his mind and at the same time to pay attention to the forms (letters, sounds, words, etc.).

In accordance with the first of these tendencies he follows the directions of the teacher by spelling or naming the words, by sound-

ing the letters or syllables, and by pronouncing the syllables, words or sentences. In these ways he learns to pronounce as many words as he can recognize, but he has not learned to read in any true sense of the term. These formal methods, known as the alphabetic, phonic, word and sentence methods are gradually giving way to the more real dramatic and thought methods. The common practice of giving a part of the reading period to mere word pronouncing is unfortunate, for such an exercise is never really reading. If any phonic, word, or sentence drills are given they should be separated from the reading lesson proper. Certain signs indicate that such drills may gradually disappear from school work since better results can be secured by keeping the meaning before the mind and perfecting the forms by giving them secondary attention. Drill in the correct pronunciation of isolated syllables or words has very little effect in real reading, because the associations formed by the drill are not of the same kind as those used in reading. The great method of securing good pronunciation is to have the child frequently hear well pronounced language, and more or less unconsciously imitate it.

If the second of these tendencies prevails the child expresses his thoughts by voluntarily spelling, sounding or pronouncing the words. In this way he gradually acquires new languages, as it were, by which to express his thoughts and meanings, and these languages give most thoro practice in spelling, in pronouncing, and in other formal aspects of expression.

4. Dramatization. When the dramatic tendencies arise in the child he begins to put himself in another's place, to feel with another, and to express himself in such a way as to reveal the spirit of some person or occasion. As a method this is very efficient in teaching reading if due care is taken to keep the work free from formality. The forms of expression are controlled by controlling the experiences. A thoro grounding in dramatization seems to be essential to satisfactory progress in the higher stages and to the most successful use of the higher methods.

In using this method the teacher is not limited to the forms of expression which arise in the children spontaneously. He may by using imitation lead the children to assume various bodily attitudes which will react on their experiences and thereby mold their forms of expression in the desired way. The dangers which arise

in doing this may be avoided by giving many copies for the children to imitate and by always making this work supplementary to the method of working from within out.

5. Thought. The activities of mind which are most prominent in this stage are those which carry the meanings which one gets in silent reading. These are usually thinking activities and the outcome is a series of thoughts.

The thought methods ask the child to fix his attention on the thought suggested by the language which he is reading and on the way his mind acts in realizing and revealing these thoughts. The underlying principle of these methods when used in teaching expressive reading is that the best forms of expression may be secured (1) by encouraging the child to give spontaneous expression to his thoughts, (2) by molding these thoughts in such a way as to secure more approved forms of expression, and (3) by adding to the consciousness of the meaning some attention to the forms when necessary. The success of these methods when wisely used is one of the most encouraging things in public school work.

6. Purpose. As a stage of development this deserves more attention than it has received in public schools, and as a method it is most promising. When the child's reading fulfills some real purpose of which he is conscious he is using the purpose method. In this as in the thought method the chief attention is not given to the forms of language or expression but to the inner meaning, though some secondary attention may be given to the forms. When the purpose has a social reference it is very efficient in controlling both the thinking and the expression. This method excels all others in bringing out latent powers and in using them and all other powers in the most effective way. It gives a principle by which the great complexity of experience may be organized.

On entering school the child should have many strong and active instincts; he should be skilful in imitating many things, and he should have well formed habits of obedience. Upon these the teacher must build. Each of these has its fulfillment in the next and yet it persists along with each of the others. By a right use of all of these the teacher will hasten the child's progress to the dramatic stage. Then by adding the dramatic method to those already employed the teacher insures further progress in the best way. Well directed work in the use of the dramatic method

gradually leads on to the thought stage. The purpose method may be used as soon as the children can hold a social purpose in mind while reading. At just what age a child reaches each of these stages is not known. Care should be taken to avoid the practice both of keeping the children too long in one stage and also of hurrying them on to a new stage. Perhaps the safest principle to follow in deciding when to begin to ask the children consciously to use the method of any higher stage is when this method has already arisen unconsciously in the child.

II. SUBJECT MATTER

1. Principles which should govern in selecting subject matter for the different grades:
 - (1) Only that should be read which has some kind of real worth.
 - (2) In each grade that should be read which can have some kind of real meaning to the children in that stage of development.
 - (3) The mind's power to receive and appreciate is quite a distance ahead of its power to reveal expressively.
 - (4) Success both in appreciating and in revealing depends upon securing the right amount of bodily response (including movements). The motor type of child may use too much movement and the sensory type, too little.
2. Kinds of material best adapted to school work in literature and reading.

For the earlier grades may be suggested: Mother Goose rhymes, jingles, folk lore, fairy tales, and simple stories of primitive life.

In general, use stories which appeal to the imagination and to feeling and which contain action, adventure, mystery, magic, games, etc., told in a simple way.

For the middle grades, fables, ballads, stories of heroes and of heroic adventure, epics, and simple dramas are desirable.

In general, use that literature which appeals to imagination and feeling as related to the world of deeds, which is somewhat melodramatic and even grotesque, and which gives opportunity for the child's powers of make-believe to have full swing.

For the upper grades the following are more suitable: lyrics, epics, dramas, biography, detective stories, romances.

In general an introduction to some of the best literature of life and love should be studied at this time.

3. Texts used in the different grades.

FIRST GRADE

B Class: Printed Action Commands; The Pancake (Folk-tale from Chart); Hawthorne, Sunbonnet, and Folk Lore Primers.

A Class: In Mythland; Cyr Advanced First Reader; Realistic First Reader; Once Upon a Time Stories; Folk Lore Stories and Proverbs, Wiltse.

SECOND GRADE

B Class: Old Time Stories; Child-Lore Dramatic Reader; Boy Blue and His Friends; Little Golden Hood.

A Class: Child Life, Blaisdell; Bow Wow and Mew Mew, Craik; Fairy Tales and Fables, Thompson; Stepping Stones to Literature II; Cyr II; Tree Dwellers.

THIRD GRADE

B Class: Second Reader, Baker & Carpenter; Third Reader, Baldwin; Stories of Mother Goose Village, Bigham; Fairy Stories and Fables, Baldwin; Early Cave Men, Dopp; Robinson Crusoe, De Foe.

A Class: Stepping Stones to Literature III; Letters From a Cat, H. H. Jackson; Grover's Art Literature III; Later Cave Men, Dopp; Hawthorne II.

FOURTH GRADE

B Class: Third Reader, Judson & Bender; Third Reader, Baker & Carpenter: Viking Tales, Hall.

A Class: Third Reader, Jones; Docas, Snedden; Alice's Adventures in Wonderland, Carroll; Adventures of a Brownie; Classics in Dramatic Form.

FIFTH GRADE

B Class: Third Reader, Hawthorne; Stepping Stones IV; Ulysses, Lamb; Sir Bevis, Jeffries. In connection with Greek history work — Stories from Plato, Burt.

A Class: Heart of Oak III, (except Ulysses); Fourth Reader, Jones; Graded Literature Reader, IV; King of Golden River, Ruskin; Christmas Carol, Bird. For dramatization: — Hiawatha, Robin Hood.

SIXTH GRADE

B Class: King Arthur; Baldwin V; Judson and Bender V; Jackanapes and the Brownies.

A Class: William Tell; Cyr V; Lobo, Rag, and Vixen.

SEVENTH GRADE

B Class: Hawthorne Fourth and Stepping Stones 5th — most of the selections in each, always used. The Flag Raising — always used. Miles Standish — used occasionally.

A Class: Baldwin Sixth Reader — always used. Occasional use is made of Birds and Bees, Holmes Leaflets, and Hawthorne's Wonder Book.

EIGHTH GRADE

B Class: Evolution of Expression, Vol. I., Emerson; A Hunting of the Deer, Warner; Lady of the Lake, Scott; Vision of Sir Launfal, Lowell; Idylls of the King (selection from); Tennyson; Julius Caesar, Shakespeare.

A Class: Grammar School Fourth Reader, Elson; Ivanhoe (adapted), Scott; Merchant of Venice, Shakespeare; Twelve Stories from Dickens; Enoch Arden, Tennyson; The Man Without a Country, Hale.

MUSIC

The course includes the following topics in school music. To these are added subjects in other departments which are indicated by the sign as given.

Elements of Notation—Voice Study (Child and Adult)—Sight Reading—Song Study and Interpretation—Methods—Ear Training (Oral and written)—Practice Teaching and Observation Work—Musical Biography—Music Form and Analysis—Choral Practice—*Literary Interpretation—*Reading—*Pedagogy—*Psychology—*History of Education—*School Management.

I. Elements of Notation.

Text — Elements in Music — Bertenshaw.

Rhythm — Note, dot, rest, bar, measure, accent, time signature.

Melody — (1) Major Scale: Construction and transposition; (2) Minor Scale: Related and tonic. (3) Chromatic Scale.

II. Voice Study.

Voice training, sight reading, song interpretation, and musical literature have a lasting value in musical life. Since studio, choral society, and chorus choir prefer the high school graduate who has attained a fair mastery in the subjects mentioned, these might well be regarded as the practical side of a public school music course. The professional side belongs to the teacher, and in addition to the topics as outlined would include Musical History, Harmony and a Piano-forte course.

The Voice is the instrument which the pupil learns to use in the school room. Possibly, the constantly changing school voice is the greatest problem for the grade teacher to solve. Therefore, the course is so planned that the chapter on Voice Study forms a background for all subsequent work. An effort is made to treat music as a language, a simple language which the child can comprehend, appreciate and enjoy.

1. The Child Voice.

Text — The Child Voice in Singing — Howard.

The Care and Use of the Child Voice — Bates.

BREATHING EXERCISES for children should be few and simple. An abundance of fresh air, a good posture, and daily, vigorous outdoor play will make for breath control when the time arrives for intelligent use of the breath in singing and speaking. Try gentle, rhythmic breathing of fresh air at suitable times during the day.

Exercise I. Inhale, count four; hold, count four; exhale, count four; rest, count four. Repeat several times.

Exercise II. Inhale, exhale abruptly.

Exercise III. Inhale, sustain soft tone upon Do in Key of E — use vowel combination oo - e - a. Transpose by half tones higher, singing slowly and softly.

VOCAL EXERCISES: Every song, every exercise must be made the means of voice training. Vocalize songs, sight reading exercises with ah, la, ta, who, loo, and other syllables.

2. The Adolescent Voice.

a. THE SOPRANO VOICE.

If in childhood the use of the head tone has been practiced, the voice will develop naturally. Encourage a light, flexible tone, unconscious effort in the upper register. The teacher should notice the tone quality of the speaking voice, for much can be gained from a careful study of it. Frequently test voices individually; sopranos who can sing easily upward from middle C to G (first space above) should continue singing that part; all may be classed as altos who can sing downward with the right tone quality from C (third space) to one or two notes below middle C.

b. THE ALTO VOICE.

The alto and soprano voices differ largely in timbre, tone-color, tone quality. There is the same difference between the alto and the soprano voice as exists between a cello and a violin. Neither instrument is limited in compass, they vary only in tone quality. The alto voice is capable of a head tone, or of producing high notes fully as beautiful as are found among sopranos, though unlike in timbre. The school alto suffers frequently because of a wrong use of the voice, the thick tone is forced upward, and becomes unmusical. The chest-tone in itself is musical when produced correctly. Deep breathing and an open throat will result in mellow, soft tones. The evenly developed scale should be the aim thruout school life.

The high, medium, and low tones ought to be considered alike, and as far as possible, be developed at the proper time. Melody and part-singing must alternate continually in school singing since it would be fatal if any one of the parts continued singing within a limited compass. It is also difficult to determine the future of a voice at an early period, therefore, interchange parts frequently in upper grades.

c. THE TENOR VOICE.

The change in the boy voice is more or less gradual, boys who have been trained in the use of the head voice retaining their voices much longer than when allowed to force the voice. While the average boy imagines he has a bass voice when the change takes place, his voice is in reality an unknown quantity. Listen for the tenor quality which is high and light, possessing something of the quality of the deep female voice, or alto timbre. Try the boy upon the descending scale, beginning with middle C and notice any undue effort in reaching the lower tones. If it is evident that a boy has a tenor voice he should not be allowed to sing below G, fourth space of the bass clef. The tenor voice is limited in compass even after much training. A series of exercises which follow the gradual change of the voice would seem desirable at the beginning of the mutation period. The new tenor voice can be employed in singing the second alto in three part songs, which are found in most advanced music readers. By and by the part usually assigned the tenor in four part music for mixed voices can be attempted.

d THE BASS VOICE. Text: Melodia, Part I. Cole and Lewis, The Stanhope Edition. No. 102-3-4.

To begin work in the bass clef in the key of G (pitch of Do, fourth space) and then descend thru the keys until the key of C is reached would seem to conform more with the development of the boy voice, than to begin upon a much lower pitch. The bass voice will grow more resonant and musical if medium tones are developed at first; avoid any forcing of the voice during the mutation period. There should be much unison singing of exercises and songs upon beginning the use of the bass clef. Give individual attention as far as is possible since all voices do not change alike. A special class for boys

during the mutation period would prove helpful; after the voice is established any text can be employed.

e. **THE VOICE OF THE GRADE TEACHER.**

Text—Book I, Vocal A, B, C—Panofka. Op. 9. Concone.

Since the voice of the teacher is all important in the school-room, the grade teacher who has had special voice training is most fortunate. Individual voice or class training would make many things possible in teaching sight reading and song interpretation. The sustained tone is most essential in training the adult voice. Practice upon the sustained tone is also helpful in gaining breath control. The study of a beautiful tone, and coming in contact with musical life beyond the schoolroom is a source of inspiration.

III. The Art of Conducting.

1. **THE BATON:** There should be leadership in conducting a music class. The tempo is all important in singing both song and exercise. The number and value of beats, the number and place of accents can easily be explained and understood, but the interpretation of tempo and time is a far more subtle and difficult task. Because of the nature of the song there should be variety in the tempo. The attack will improve too under leadership. Holding the baton lightly and gracefully, and beating time with an easy, rhythmic swing, using but the necessary motions, will impress time, rhythm, and tempo in a very simple, direct way. Secure the attention of the class by saying (for example, in 4-4 time, first note on first beat), one, - two, - three - **sing**, giving signal for beginning on beat preceding first note of measure. The mechanical rhythm and tempo of the schoolroom can be displaced only thru spirited, enthusiastic leadership on the part of the teacher. Nothing will wake up a drowsy, rote song class more than—"Shall we sing it this way?", followed by a spirited illustration with voice or baton. The spirit of the tempo brings much life into a schoolroom; try to make music a source of inspiration.
2. **THE PITCH-PIPE:** The frequent and rapid giving of the pitch is vital in securing correct intonation and voice

placing. The use of the pitch-pipe and baton are among the essentials in method of teaching music.

Formula for the use of the pitch-pipe (C pitch-pipe).

To find the key-note, Scale of C—

Sound always upper Do, sing to lower Do, call it Do.

To find the key-note, Scale of G (one sharp).

Sound C, sing to Sol, call it Do.

To find the key-note, Scale of D (two sharps).

Sound C, sing to lower Do, sing Re, call it Do.

To find the key-note, Scale of A (three sharps).

Sound C, sing to La, call it Do.

To find the key-note, Scale of E (four sharps).

Sound C, sing to Mi, call it Do.

To find the key-note, Scale of F (one flat).

Sound C, sing to Fa, call it Do.

To find the key-note, Scale of B flat (two flats),

Sound C, sing to Re in key of B flat, call it Do.

To find the key-note, Scale of E flat (three flats).

Sound C, sing to lower Do, call it La in key of E flat, sing up to Do in key of E flat.

To find the key-note, Scale of A flat (four flats).

Sound C, call it Mi in key of A flat, sing down to key-note of A flat.

IV. Song Study and Interpretation.

a. The Grade Teacher and the Rote Song.

The teacher familiar with a long list of rote songs stands in little need of methods and theories. A simple, direct way of presenting a song appeals most to the child. The Rote Song requires study and preparation quite as much as does the Art Song. Therefore, if grade teachers would find it possible to devote a part of each school year to the study of rote songs, the result would prove a real musical uplift in the schoolroom. The primary teacher ought to have a good voice, dramatic power, and keen interpretative ability in presenting a simple rote song. Then she must possess the art of skilful questioning; she must have the gift of story telling; she needs a large fund of general information upon birds, bees and flowers, the trades and occupations, the world in which the child lives. Always present the song as a whole, singing the song for the class several times before allowing children to imitate. Then ask the class to repeat a phrase, or more, according to the nature of the song.

b. SONG INTERPRETATION.

A. Melody.

1. Tone-quality should be pure musical, sympathetic, depending largely upon training and method; intonation must be correct as to pitch and intervals.
2. Rhythmic quality: observe the accents, secure the swing of the rhythm.
3. Tempo includes movement, rate of speed, spirit of the music.
4. Attack of tones and leads must be exact; insist upon precision in quitting final syllables.
5. Shading as to soft and loud passages: a quiet tone, a resonant forte, a fine climax, these all most effective among mature voices.

B. Words.

1. Tone color. Look for the mood-pictures in the song; create picture which words represent; look for expressive words and phrases in song.
2. Diction should be graceful, dwelling upon open vowel sound; enunciating as in distinct reading.
3. Phrasing is the grouping of words to express thought; recite words to secure perfect phrasing and expression.

V. Methods.

Musicianship is needed in the correct use of the voice, pitch-pipe, baton, sight-reading and song interpretation. Method is needed in presenting some of the first steps in notation. It is the mastery of *ideas* which is so important in school music, the working out of a song or exercise along these lines presents a never failing source of interest and pleasure.

IN PRIMARY GRADES

1. THE ROTE SONG.

Text—A Song Primer—Alys Bentley, 30c.

Small Songs for Small Singers—W. H. Neidlinger, 50c.

The Discontented Goldfish—W. H. Neidlinger, 75c.

Song Development for Little Children—Heartz and Ripley, 50c.

Songs of the Season—George, 50c.

Mother Goose Melodies—J. W. Elliot, 35c.

Songs from the Child World—Jessie L. Gaynor. Book, I, II, \$1.00.

Lilts and Lyrics—Jessie L. Gaynor, \$1.00.

The child's first effort in music begins with a study of simple musical literature. He learns to sing as he learns to read, thru the use of a simple song-story, which is closely identified with his daily life and surroundings. Self expression on the part of the child is made possible only thru the selection of suitable song material. Play and action songs ought to call forth a natural happy expression in singing, because self-activity is so strong in childhood. The Mother Goose rhymes and fairy stories are easily dramatized and therefore satisfy the dramatic instinct of the child.

The rote song is in many ways a preparation for music reading and future study.

2. EAR TRAINING.

a. MELODY STUDIES.

For the sake of testing the class and individual members of the school in distinguishing sounds as to pitch and length, make the following experiments. The teacher should sing the interval 1 to 8 in scale of E flat, using Loo, La, names as Flora, Lulu. Class imitate. Test individuals. Let children try to recognize the voice of any play-mate when speaking, singing, calling, or imitating sounds in nature. Tell a story which brings into play the use of the child voice; for example, The Three Bears, The Lion and the Mouse.

Name all the song birds of the locality, if possible reproducing some of the songs. Name all the insects that are musicians. In making the following tests, use pitch-pipe, piano, or any musical instrument, bells, whistles, musical toys. Always give two sounds and ask the class — are they alike or different? Ask the class, or pupil to distinguish between high and low sounds; loud and soft sounds; long and short sounds; fast and slow sounds; distant and near sounds; clear and dull sounds; harsh and sweet sounds; even and uneven sounds; Another test can be given by humming a familiar song, all who recognize song, raise hands. The formal study of intervals is then introduced orally: The first step is imitation as in the rote song. The teacher sings a group of notes with La, Loo or syllable names, class and individuals repeat; this is sometimes called tone-matching. Use ascending scale upon beginning this step.

Key of G. Tone-Matching.

a. Do, Sol; Do, Mi, Sol; Do, Sol, Mi; Sol, Mi, Do; Sol, Do, Sol, Do, Sol;

Do, Sol; Do, Fa; Do, Fa, Mi, Re, Do; Do, Fa, Do, Fa, Do; Do, Mi, Do; Do, Sol, Fa, Mi, Re, Do.

- b. (Use lower Sol). Do, Sol; Do, Sol, La, Si, Do; Do, La; Do, Sol; Do, Fa, Do; Do, Mi, Sol, (upper) Sol (lower), Do.

Oral dictation follows imitation lessons. Teacher says, "Sing Do, Sol." Class responds using syllable names or sometimes La. Review all exercises given in first group for oral dictation.

The following group can also be included in dictation work, teacher change number names as given to syllable names.

Key of D. Dictation.

8, 7, 6, 8—8, 7, 6, 5, 8—8, 7, 7, 8—8, 7, 6, 6, 7, 8—8, 7, 6, 5, 5, 6, 7, 8—1, 2, 1—1, 2, 3, 1—1, 2, 3, 4, 1—1, 2, 3, 4, 5, 1—1, 2, 3, 4, 5, 4, 5, 4, 3, 5, 4, 3, 2, 5, 1—1, 2, 2, 1—1, 2, 3, 3, 2, 1—1, 2, 3, 4, 4, 3, 2, 1—1, 2, 3, 4, 5, 5, 1, 5, 4, 3, 2, 1—1, 2, 3, 4, 5, 5, 4, 3, 5, 4, 3, 2, 5, 1—1, 2, 3, 4, 5, 6, 7, 8, 8, 7, 8—8, 7, 6, 5, 4, 3, 2, 1—1, 2, 3, 4, 5, 6, 7, 8—1, 3, 5, 8, 5, 3, 1—1, 4, 6, 8, 6, 4, 1—1, 8, 1.

- c. Sing the scale down; up; loudly; softly; slowly; rapidly; repeating each tone; class and teacher alternating; individual scale singing.

b. RHYTHM STUDIES.

The child is naturally rhythmic in movement, speech and song. He needs most a concrete form of expression which will bring into play his rhythmic sense. For this purpose the singing of graceful, rhythmic music is of greatest importance in establishing a sense of rhythm. Rhythmical physical exercises are also helpful.

The recurring accent in poetry is helpful in gaining the idea of accent and measure. The Mother Goose Rhymes, Robert Louis Stevenson's *Child's Garden of Verses*, and many child lyrics by Eugene Field can be used in finding the rhythmic element. Tap the rhythm of the verses; sing verses. Tap the rhythm in following. Are they alike or different?

- | | | |
|---|----|-------------------------------------|
| { | a. | Tick-tock; tick-tock; tick-tock. |
| | b. | Rap-tap-tap; tit-tat-too. |
| | a. | Ding-dong; ding-dong; ding-dong. |
| | b. | Lul-la-bye; lul-la-bye; lul-la-bye. |

How many times does the bell ring? (Ring two part measure, three-part measure and other forms.)

Send one child to the board and let him indicate the rhythm by drawing downward strokes in time with the clapping of the class, using a stronger and longer stroke for the strong than for the weak pulses: (a) Let the strokes be made in time with the clapping; use different measure forms; (b) Let the class recite in

time with the clapping and board-work; strong, weak, strong, weak, or strong, weak, weak; giving a variety of measures.

3. **VISUALIZING THE SONG.** (Primer in hands of pupils, second year.) The preparatory work leading to formal sight reading consists in visualizing many of the songs found in the music primer. This step is necessary to make pupils familiar with the use of a music reader.

1. Teacher write song upon blackboard. 2. Pupils count notes upon first line, second line and other degrees of the staff; pupils count measures; pupils find highest note; lowest note; longest and shortest notes; which note is most often repeated; in how many places skips are to be found. 3. Class open books to song; teacher indicate a note upon blackboard; pupils find the same in books. Teacher name a word; pupils find the same in books; point to a word upon blackboard; find the same in books; count the number of staves upon page; find the first staff, fourth staff, etc.; find third measure, second staff; name a word belonging to above measure; find word ———; describe where it is found. 4. Develop the idea of the phrase; teacher sing first phrase, then second; are they alike? different? Discover number of different melodies in a song; sketch rhythm; notice accent.

4. SIGHT READING.

Text: Charts A and B and Primer, Natural Music Course.

The lessons upon the chart should be brief, and presented as in the reading class. All theory should be omitted, the lesson serving only as a mode of thought expression, being as yet merely a simple language lesson.

We should seek to find a simple text for the first steps; impress familiarity with the scale form, key signature, key-note, and time signature; read exercise with syllable names until thoroly familiar; look for melodic phrase and rhythmic form.

- a. Scale drill. Place scale upon blackboard and give rapid drill upon intervals and skips.
- b. Chart drill. 1. Teacher point; 2. Child point; 3. Find highest, lowest, or shortest note; 4. Class select exercise; 5. Individuals sing; 6. One row sing — all others listen, etc.; 7. Teacher sing without naming exercise — Class indicate exercise; 8. Teacher point out a group of notes — take away

pointer, class singing from memory; 9. Use syllables — La — Loo-Koo — Vowels — Words; 10. Call for tones by naming degree of staff. The chart work can alternate with sight reading in the Primer later in the year.

- c. Primer drill. 1. Clap the hands at the first note of each measure; 2. Sing the key-note each time and think the others; 3. Sing the first measure, think the second, alternate; 4. Beat time, accent the first note in each measure; 5. How many beats are there in a measure? 6. What is the time signature? 7. What does the upper figure represent? the lower? 8. Name the first note in the exercise, the last note. 9. Does the exercise go up or down, or both? 10. Is the key-note sung more than once? 11. Where is the key-note? 12. Are there any skips? 13. What do we call the figures at the beginning of the exercise? 14. Sing the exercise forward and backward; class and teacher alternate.

5. INDIVIDUAL SINGING.

Thruout the school course, individual singing is of importance. In first and second grades the daily music lesson ought to consist of individual as well as class singing. In the upper grades have separate class rooms for boys and girls during individual singing since the changing voice is apt to lead to embarrassing moments in the music hour. The success of the music course must be measured by individual results.

6. MONOTONE SINGING.

The monotone element is found in every subject of a common school course. The monotone child is usually the backward child, requiring more individual attention than does the average member of a class. However, no work is more effective than the cure of the monotone, especially in the First Grade. If all monotone children were trained to sing correctly during the first year, or in the early part of the course, the future classes would be much more evenly graded than at present. The First Grade music class ought to be divided into two sections or choirs, each having separate music periods. Begin in the monotone class (or section one) with individual work; try first of all to change the speaking tone (the one usually employed by the monotone) to the singing tone. In order to accomplish this, use the work as outlined in the Ear Training

Course. Time is well spent upon the monotone class as has been shown in schools in which this work has been attempted.

7. EXAMINATION IN MUSIC.

During each term there should be given an individual test upon work accomplished. If a pupil can sing the scale correctly, read an exercise intelligently, sing a song with spirit, and with good tonal and rhythmic qualities he has mastered the fundamental elements in music.

INTERMEDIATE AND GRAMMAR GRADES

The work in the upper grades consists of vocal exercises; sight reading of exercises and songs in the diatonic, chromatic, and minor forms of the scale; rhythm of simple and divided beat; simple and compound measure; unison and part singing; and advanced ear training and manuscript exercises. Independent work on the part of both class and individual pupils is now possible, this being especially evident in part singing. The most important problem in the seventh and eighth grades is the treatment of the adolescent voice. (See notes upon the adolescent voice.)

1. EAR TRAINING.

Text: The Manuscript Series of Vocal Music—Robert Foreman.

1. COPIED WORK. (All Grades).

Copy from blackboard (1) the scale; (2) simple exercise; (3) song.

2. DICTATION EXERCISE. (All Grades).

(1) a. Class write scale in which the dictation exercise is to be given; b. Teacher give directions for form of notation, and arrangement of exercise; c. Class sing the scale; d. Teacher sing the phrase with syllable "La;" class write notes; e. Test. Teacher read syllable names of notes and degrees of staff. (2) Draw the staff upon the blackboard; class or teacher sing phrase, or song with syllable "la", pupil reproducing the same upon blackboard.

3. INVENTION, or original work. (Intermediate and Grammar Grades.)

- a. Complete a given melody; b. Complete notation of a song;
- c. Complete omitted measures of a song or exercise; d. Fit a given poem to a given melody; e. Compose a poem to a given melody; f. Write an original melody. (Teacher indicate key, time signature, length of melody.)

4. MEMORY WORK.

- a. Write from memory nine scales commonly in use; b. Familiar song.

5. TIME EXERCISES.

- a. Add necessary time signatures to a given exercise; add necessary bars; b. Re-write an entire song in a new time form.

2. THE PART SONG. (Intermediate and Grammar Grades.)

Text — The Music Reader as usually employed — supplementary texts as given: The Laurel Song Reader — Tomlins, 60c; The Lyric Song Book — Loomis, 60c; High School Song Book — Zeiner, 85c; The School Song Book — McConathy, 50c; One Hundred Folk Songs — Gilbert, 50c.

In the Intermediate and Grammar Grades a study of national life becomes possible. A broader view is obtained thru the singing of folk songs, and music of a people. In the High school, musical form, and music as literature is possible. Part songs of different nations, selections from the oratorio and opera, and concerted works offer abundant material for the study of national and classical musical literature.

The grade teacher comes in contact with an untrained musical taste, not a poor taste, simply immaturity in taste as in all other forms of class room work. Therefore, the selection of material is important since a fine taste in music is cultivated thru the use of songs which have a permanent literary and musical value.

For the best results in class work, organize the school so that soprano, alto, tenor, and bass voices are grouped each day.

NATIONAL HOLIDAYS. At Thanksgiving time, Lincoln's birthday, Washington's birthday and Memorial Day the patriotic songs of our country ought to be sung in our Public Schools.

Text — Patriotic Songs — Brewer.

VI. Organization of Work Thruout the Grades.

The topics as outlined are presented thruout the grades. The work simply increases in difficulty as the pupil advances, the texts

Texts.

Rote Songs.	{	Voice.
Ear training exercises.		Melody.
		Rhythm.

Chart A — Natural Music Series.

Modern Music Primer — Part I.
Rote Songs.
Ear training exercises — same as in First Year.
Visualizing.
Chart B — Natural Music Series.

Melodic First Reader.
Modern Primer — Parts II, III.
Rote Songs.
Ear training exercises.
Sight Reading.

{ Voice.
{ Melody.
{ Rhythm.
{ Dictation.

Book One, Eleanor Smith Music Course.
Modern First Book.
Ear training exercises — same as in Third Year.
Sight Reading { Exercises.
Songs.

Book Two, Eleanor Smith Music Course.
Modern Second Book — Part I.
Ear training, Dictation and Manuscript exercises. Book I., Manuscript Series of Vocal Music — Robert Foresman.

Book Two, Eleanor Smith Music Course.
Modern Second Book — Part II.
Ear training — Outline same as in Fifth Year.

Book Three, Eleanor Smith Music Course.
Modern Third Book — Part I.
Ear training — Book II. Manuscript Series of Vocal Music.

Book Four, Eleanor Smith Music Course.
Modern Third Book — Part III.
Ear training — Book III. Manuscript Series of Vocal Music.

1. Signal for attention, two taps, or quietly saying, Attention!

2. Signal for position. The pupils should sit or stand in a position of attention. The body should be erect and alert, in order that vocal organs can respond easily. The throat should be well opened so that tone production is easy.

The book should be held so that the lower edge rests upon the desk; the index finger of the right hand should be placed along the right edge of the book, and be used in tapping the time.

3. Upon beginning the vocal work use the pitch-pipe in finding the pitch of key-note; use the baton in giving time and tempo.

Order of Lesson, Primary Grade.

1. Breathing exercises and vocal drill.....1 minute
2. Rote Song (review).....4 minutes
3. Ear training exercises.....1 minute
4. Visualizing of song.....1 minute
5. Sight reading.....2 minutes
6. Rote song (new).....3 minutes

The steps can alternate if necessary. Thus, first day 1, 2, 3, 5; second day 1, 2, 4, 6; third day 2, 3, 5, 6, etc.

Individual and class singing should alternate thruout the lesson.

Order of Lesson. Intermediate and Grammar Grades.

1. Breathing exercises and vocal drill.....1 minute
2. Song (review).....4 minutes
3. Sight reading, Exercises and Song; discuss scale form, key signature, key-note, time signature, rhythm form....6 minutes
4. Song Interpretation (New Song).....4 minutes
5. Ear Training.....3 minutes

VIII. A Course in Music Appreciation is given during the daily chorus practice period, the illustrations being used for all special events of the school year, including commencement exercises.

DRAWING

I. INTRODUCTION

Any education, to be really effective, must rest upon the broad culture of the intellectual, æsthetic, and moral powers of the mind. Drawing appeals forcibly to all these powers, and on this appeal rests its chief claim to a place in the school course. Pedagogically speaking, drawing is not a talent possessed by the few, but it is a means of expression common to all, thru the use of which may be developed observation, self-activity, concentration, imitation, inventive and creative power.

DRAWING IN THE PRIMARY GRADES

Drawing in the primary grades should be as free and spontaneous as early speech. It should show the development of the individual instead of the object merely.

Early results are crude, but children should not omit doing things which they cannot do well. The desire to express should arouse proper study thru guidance by the teacher. Variety in the objects drawn will eliminate conventionality and induce critical study and observation.

IMAGINATIVE AND ILLUSTRATIVE DRAWING. From the first the child's impulse is to create, to express graphically his ideas and impressions of things. It is that energy, common to every child, which leads him to express his individual thought, feeling, and experience in some definite form. Imaginative drawing is an aid to all other studies; it should not exist as a separate activity, but as a friend and playmate of every study, growing itself mainly by helping others. Its purpose is to develop the creative power of the child. In the expression of thoughts and in the making of exact records, drawing is as important a mode of expression as language.

Exercises in telling stories without words are wonderfully helpful in developing the power of expression. Illustrate games, action of animals, the trades, as the blacksmith, the shoemaker, the farmer. These exercises in dramatic action should be followed by expression in drawing. Stories which stimulate the imagination to definite pictorial expression are nature stories, classic myths, Mother Goose melodies, and Indian folk-lore. Selections from child literature of Longfellow, Eugene Field, James Whitcomb Riley, Robert Louis Stevenson, and many others are excellent.

To teach this subject of spontaneous story drawing the teacher must be a keen observer. He must be able to express his own ideas, and, to teach seeing, he must himself see. The child must be unhampered by many directions as to what to draw, in placing or size. He must not be shown pictures to assist him in his efforts. All the children's drawings must be summed up under the words, IMPRESSION, EXPRESSION. Great care must be taken in selecting stories for illustration. Stories should be short, suggestive, rather than descriptive, having few dramatic situations. They should in a measure be within a child's experience and of direct interest to him.

No exercise employs the observing faculties of the child better than the DRAWING OF NATURAL THINGS OR OBJECTS, as their infinite variety of form and color demands his closest attention in his efforts to picture them. Nature study connects science, nature, and literature.

Children love life and action. Rapid sketching from nature of plant and animal life should begin in the lowest grade. The range of subjects must be large, consisting chiefly of scenes of human interest, with human figures in action illustrating episodes in history and literature, events in the children's own lives, plants, foliage, vegetables, fruits, seeds, insects, and animals. Trees and landscape study should be included under this topic also. These all are of special interest because they are what the pupils read about and study the most, and are the most beautiful to them.

At first the work tends to be conventional, but repeated effort thru these early grades will result in greater realism, and will in the subsequent work do away with hardness of line and figure. Freedom of expression is the keynote to success in all this work.

FORM STUDY should come last and not first. It should consist of building with blocks, constructing in paper and clay objects of

interest in every day life, drawing of groups of common objects, these being carefully selected for their form and color. Objects should not be analyzed for their shapes, surfaces, and edges. All such knowledge will come naturally thru their uses. Form study of common objects and type forms leads to a classification of form, and gives form ideals.

PICTURE STUDY begins in the first year and runs thruout the entire course. During the first three years materials for such study should be found on the school-room walls, in the form of small photographs and prints placed before the pupils. Pictures should not be studied in an analytic way in these grades, but the interest should center in the thought of the artist as related to the home life of the child, in animal life, and in the beauties of nature which surround him.

COLOR is studied in its relation to nature and to design. School and home environment influence this. The leading colors in the spectrum are studied, and for the purpose of fixing these colors standard tablets and colored crayons are used. The three color box in water colors is also used, and with this the child is able thru right guidance to study and interpret color as he finds it in plant and animal life, in the landscape in its various changes of season, in manufactured objects, and to represent the beauty of color as shown in design.

THE MEDIUMS TO BE USED IN THE PRIMARY GRADES

The mediums or materials to be used in drawing must be determined by the nature of the subjects to be drawn, as well as by the needs of the pupils. Teachers cannot confine themselves to fixed methods or mediums. It is for them to make the child feel the power given him, to lead him to express himself directly and freely. It matters little by what means it is done; it is the spirit of the work not the medium that is of the most importance to him.

Children crave reality. Hence the child must be given mediums which express reality, not mere outline. Soft plastic mediums, as clay, colored crayons, colored chalk, colored paper, water colors, and charcoal, are the best with which to express mass, and with these mediums his creative activity has the largest possible freedom.

1. **CLAY MODELING.** Natural or manufactured objects. This may relate to form study for its own sake or it may illustrate some lesson, as a nature lesson, imaginative or illustrative drawing in reading or language. Large models are encouraged. Early work is done entirely with the fingers. Early work should be models of natural forms, later manufactured objects; geometric solids should rarely be attempted in primary grades on account of the difficulty of making them accurate.

Clay modeling cultivates observation, arousing the activities of the child; accuracy in the perception of form; dexterity of hand; sense of form and proportion; greater power in drawing, due to necessary study of the object while modeling; love and appreciation of beauty in form; enjoyment derived thru creative power; concentration of attention.

Sand modeling on the sand-table is excellent for illustrative work in geography, reading, and all illustrative work in the primary grades.

2. **COLORLED CRAYONS AND COLORED CHALK.** These are a more ready means for picturing objects in color, with very young children, than water colors.

3. **FREE HAND PAPER CUTTING.** In color and in black and gray. This medium leads to the study of masses of form and relation of size and detail. Color is studied thru color combinations as seen in nature and in pictorial combinations. Stories are told with the scissors, using black or some neutral toned paper. All this work must be mounted on suitable backgrounds.

4. **WATER COLORS.** The three color box and brush number three. In this medium the mixture of color and the handling of the brush are more difficult than work done with colored chalk or crayon. Using the brush for ink brush work leads the pupil to become acquainted somewhat with the management of the brush. Early work in water colors should include the rendering of large objects and landscapes; work in which detail is not essential. Simplicity of expression and directness in the handling of medium are the important features of this work.

5. **CHARCOAL DRAWINGS** on large sheets of manilla paper give the child a freedom to express form, size, and color.

6. THE BLACKBOARD is a very ready means of expression in drawing, both for the teacher and for the pupil. It insures a freedom which no other medium can give. The blackboard should be very frequently used for object drawing and illustrative work.

7. When the LEAD PENCIL is used it should be a very soft grade, so that it may express both color and form, thus avoiding hardness of figure and outline.

In the primary grades the drawing occupies twenty minutes each school day in the week. Good reference material — Prang Manuals for First and Second Year, Monthly Primary Plans in the School Art Book, Art Education text-books for the First and Second Years.

II. SUBJECT MATTER

FIRST GRADE

FALL TERM

Much blackboard drawing should be encouraged at this time. It can be done on a large scale because it admits of more freedom than other mediums. Some time each day should be devoted to this. Color is taught by the use of colored tablets and water color crayons. Brush work is taught with writing ink or neutral colors from the water color box. In Nature work study seeds and seed-houses, fruits, vegetables, nature in the landscape; October and its beauty of color in landscape, tree, and leaf. In November the thought of the harvest, corn and grains, fruits, and vegetables. Parts from the story of Hiawatha relating to the harvest. In animal study, the squirrel and the turkey. The winter homes of caterpillars. The storing of grain and food for the winter. Migration of birds.

Illustrative work, relating this to block-building, sand-table modeling. The Life of the Pilgrims. Nature poems illustrated. Making of seed boxes.

Clay modeling. This is imaginative and illustrative; cocoons, animals, fruits.

Paper folding and free-hand paper cutting. Imaginative and illustrative.

Sketching in colored crayons flowers, berries, seeds, and fruits; also the beauties in nature as shown in the landscape in trees and foliage.

Teach drawing of objects like sphere and cube, relating these to block-building, natural forms, and common objects. This requires critical observation. Teach paper folding; a market basket, a ship, a Puritan cape and cap.

PICTURE STUDY. Harvest scenes by Millet, Jules Breton, and Broughton's pictures of Pilgrims. No technical study should be made of pictures, but they may frequently serve as a background for a morning talk or for an illustrative lesson.

Let the drawing lesson frequently follow the morning talk. This may be in the nature of imaginative or illustrative drawing with mediums which are the most suitable to work demanded.

WINTER TERM

Continue blackboard work. Study the evergreen tree.

Paper cutting; for illustration, snow flakes. Cat and dog are studied; action studies made from life. Games of children; indoor and outdoor games, action study. No formal posing. Imaginative drawing continued; illustrative drawing used in all the departments of work. Building a fireplace, a blockhouse, a bridge, a train; illustrate this in paper cutting also. Christmas gifts; hand work, constructive ability. Study of pictures continued; home life; animal life; the Madonna and Christ-child.

In the study of the landscape at this season considerable attention should be given to proper composition.

OBJECT STUDY. This study to be worthy of its place in the school must show the individual thought and expression of the pupil. The teacher must see thru the child's eyes to be able to guide and direct him to expression.

Choose large objects good in color and form. Study size, proportion, relation, and position of detail to whole. Charcoal sketches. Color work in paper and crayon.

Draw from a pose, make it represent a character or an occupation. Local winter birds. How they live and obtain their food.

St. Valentine's Day; a post-man, a letter box. Make valentines.

Playing of games and illustrating soldiers in pose and marching. The study of the flag. Block-building; relate this to history study.

The children of the cold studied; how they live; their houses, the landscape, how they dress, what they eat and how they obtain their food; games that these children play, winter sports. Illustrative and imaginative. Incidents in the lives of the children of the cold. Illustrate these in clay, paper, blackboard drawings, sand table modelings and constructions, and in charcoal sketches.

Designing; borders for book covers, handkerchiefs. Paper folding; diameters, diagonals, and the pasting of squares and triangles. Use blocked paper, especially where the geometric figure serves as a basis for the decoration. Children's portfolios contain by this time sketches from life of animals and insects, also fall fruits and flowers. These make very good units for decorative repeats.

SPRING TERM

Illustrated stories. March weather; the wind. Study the willow tree, pussy willows, and other budding twigs. Awakening of all things; return of the birds, the spring landscape. The rainbow; color study with the prism. Moths and butterflies. Bulbs, seeds. Continue board work in all this study. Children in action from class games, dramatic poses, occupations.

In designing, use is made of natural forms, plant, animal, or insect. Designs are made for book covers, folders for nature exercises, simple borders, and surface designs. Study for this purpose repetition.

Paper-cutting for illustrative work; germination of seeds. Brush ink work is also excellent for this. Crayon and charcoal drawings, water colors, using the three color box. Neutral colors used occasionally.

Placing within given spaces landscapes, objects in groups, plants, and flowers for space relation. The tulip is studied for designing purposes. Its size and simplicity of form commend it for this purpose. Its vividness of color makes it also attractive to the child.

Block-building continued. Interest may center about the birdhouse. Let children build this.

Making in paper and cardboard May baskets, and folders for drawing work to be taken home. Picture frames and small folders for picture study.

Animals to be studied; the rabbit, the chicken, the turtle.

Clay-modeling; the rabbit, the butterfly.

Spring flowers; the teacher choosing the larger flowers, studying occasionally the entire plant with its blossoms.

SECOND AND THIRD GRADES

FALL TERM

The mediums in these grades are like those of the first grade, with the addition of the lead pencil and more water color work and less free-hand paper cutting. Brush and ink used more freely also.

The work in these grades is continued much as in the first grade. New and more difficult objects are given. The work done by the children should show more freedom in the handling of the material, greater skill in representing objects, better composition and space relation. The self-activity of the child rightly stimulated from the first to create, to illustrate, and to see should manifest itself in every department of this work.

Water colors are used from the very first, the work in the early fall being largely from nature. Make color analysis of all things studied directly from nature. Make color charts. The study of the landscape from nature study and from description. The study of leaves, flowers and insects; these to be used in elementary and applied design of book covers, program covers, portfolio ornaments. Simple geometric forms and figures introduced relating to the ellipsoid. The geometric plan traced in seeds and seed vessels. Making of seed boxes and cases. The use of insect and animal life in design. Use blocked paper for the purpose of aiding the modification of units of design.

Illustrate the changes in the dandelion plant, the milkweed, and the thistle.

Color study is continued. The spectrum with tints and shades is studied. Colored tablets for color arrangements and color relations. Colored crayons and water colors are used to make color combinations.

In October some time is given to the study of trees and their placing in a landscape.

Illustrative work relating to the season. Imaginative drawing. This work must be entirely unhampered by the teacher; the pupil must tell his story in his own way. Criticisms may be made of incorrect proportions for the purpose of stimulating observation and self-activity. This kind of work may relate to the reading lesson. Brush ink-work is excellent for this.

Study the apple tree. Make general study of other fruit trees.

In November; harvest scenes, the gathering in of the harvest. Landscapes illustrative of reading lessons, nature study, and imaginative drawing. The corn especially is studied. Fruits and vegetables are painted, drawn, and modeled. The life of the Puritans illustrated in sand-table modeling, making in clay, cardboard, and block-building. A costume pose in action.

Birds and their migration.

Picture study; harvest scenes, landscapes for composition, and tree study. Choose for these the best pictures by the best artists. Boughton's pictures for historic interest, composition, and costume study.

WINTER TERM

Drawing from groups of large and interesting objects. Charcoal study, colored crayons and water colors. Some blackboard work should be attempted frequently; this insures greater freedom, hence greater confidence. Study a piece of furniture; this is for the purpose of study of size, proportion, and appearance thru position. Pencil drawing should be encouraged. Block-building of historic buildings. Rapid sketching of a single object placed in various positions. These sketches should be large and made in charcoal. In a single lesson each child should make from three to four different sketches, each showing the careful study in appearance as influenced by position. Block-building continued, sketching results. Study of objects for placing and color combinations. The cone, pyramid, and triangular prism are studied with a review of the first year solids. Children should be led to see that how an object appears to them is more essential than how it actually looks in its individual parts. Encourage the making of sketches of interesting objects. All object study should lead toward better work in illustrative drawing.

Study of the winter landscape; color, composition, the sunset. Study of trees in winter; the pine tree.

Figure study; the poses being more varied, the pupils working with pencil, charcoal, water colors in color and neutral.

Construction work in paper and other suitable materials for Christmas gifts.

Picture study appropriate to the Christmas season; mounting of pictures, making of folders, and frames for pictures.

Action pictures; winter sports, illustrative and imaginative sketches made. Animal studies from life; Barye and Landseer are studied.

Eskimo life; reading lessons are illustrated. How the birds are fed in winter. Snow crystals; studying in these the geometric basis.

Designing; space relation studied in plaids and other simple surface designs, opposition of line, combination of colors. The use of plant, animal and insect life in decoration; naturalistic as well as modified treatment of these units in border and surface decorations.

SPRING TERM

March weather; the wind, water scenes, ships, windmills. Imaginative and illustrative drawings made of these.

Poses; dramatic action. Study games.

Buds and twigs in brush ink drawing and pencil sketching.

Colors studied, orange and blue in tints and shades; decorative use of color: how combinations should be made.

Landscape; study of the rainbow; relate this to the season. Illustrations in geography in painting and drawing.

Seeds and their germination, pencil and brush ink drawings.

Returning of the birds. Children should study the early birds, especially the robin. Paint and draw from observations made. Repeat this study when opportunity affords and it will lead toward very creditable work. Aim to have the criticisms rather lead to further and more careful study. Such study will eventually lead to better sketching.

Spring flowers drawn and painted. Pupils should be required to make good placing on paper, special attention being given throughout this work to arrangement and placing. Flowers placed within limited areas. Flowers used in design; surface and border designs made for definite purposes. Entire plant studied.

Domestic animals; picture study of animal and bird life; illustrate the pigeon-house.

Study pictures relating to season; Dupre, Millet, and Breton have painted excellent pictures relating to this season. Pantomime pictures are excellent here.

FOURTH AND FIFTH GRADES

FALL TERM

The pupils in these grades, while following somewhat similar work to that carried on in the earlier grades, should show greater freedom in the use of different mediums. Greater mechanical skill should be required as well as more artistic rendering in all work. More definite and detailed work is required in the illustration of geography and science work.

It is not a greater amount of drawing which will bring better results in expression, but better seeing and thinking. The illustrative work is of little value unless it is the expression of thought.

By the use of drawings, illustrations, and the plants themselves the pupils should become interested in the beauty of line in the growth of plants. Study of artistic reproductions of Japanese prints showing the simple rendering of plant and animal life will greatly influence the pupils' work in spirit and freedom of execution. Fall plants and flowers should be studied and drawn in color, in monochrome, and in brush ink drawings. Plants should be selected for beauty in form and color, this followed by using only most beautiful parts if plant is large. Study arrangements of plants within given areas for decorative treatment. This requires individual creation in space relation thru the division of spaces and surface areas into vertical and horizontal paneling, and the placing of simple landscape features, flowers, vines, and grasses within them. Designs for books and program covers should be made. Insects — the grasshopper, the cricket, and the beetle — are studied for decorative treatment.

The landscape is studied in color and in monochrome, in pencil, and in charcoal. Composition in this is studied in relation to color tones and values. Illustrations in pencil, pen and ink, and other suitable mediums should aid geography, written compositions, and other studies.

Study of the principles of perspective as illustrated in cylindrical forms and rectangular forms is here introduced. Develop

self-activity, concentration, observation. Lead pupils thru free expression of what they see to discover first the principles. Select very large objects for this study. The geometric solids should follow the study of common objects.

Picture study is continued. Japanese prints of flowers, insects, and birds are studied. Several of Millet's pictures are studied, especially those which relate to the harvest season. These will materially aid the pupils in the further study of composition in the landscape.

WINTER TERM

In the winter term the general plan of work relates to the more critical study of common objects. These should always be chosen for their utility or for their beauty of form and color. Selection and placing of objects should be considered, also the proper lighting.

In connection with the sketching of groups of objects the study of light and shade is begun. The best mediums for this work are charcoal or crayon, and water colors. The light and shade should be rendered in broad simple tones with no attempt at showing details. Begin with crayon or pencil point, water colors to follow. Light and shade values and color tones studied. Relation of light and shade values in composition. Balance of tone, balance of color in composition. Relate this to picture study also.

Historic art and ornament are introduced here. This study relates to simple styles of architecture and ornament as seen in buildings, in photographs of buildings, and in casts.

Drawing from the pose. This should be for costume study or to illustrate some occupation. This work should be illustrated by artistic drawings from the pose. Study in this connection the pictures of such artists and illustrators as will aid in pose drawing.

The dog is studied in pencil, crayon, and in charcoal. Memory drawings, sketching rapidly with straight lines only. Brush work in neutral wash drawings to obtain mass and general form. Rapid sketches showing the animal in different positions, merely representing action, as well as drawings showing more deliberate study and consequently more detailed study of animal.

Construction drawings showing simple working drawings of common objects; this followed by making in paper and wood.

Illustrative and imaginative drawings are continued in geography, nature study, and reading.

In picture study Murillo and his pictures are studied, those picturing child life being of special interest here.

SPRING TERM

Color is studied in its relation to design. Color tones, color harmonies and relations as seen in the spectrum with their tints and shades are studied. In design plaids and surface decoration are made. Historic art relating to design is studied and patterns for stained glass windows are made.

The landscape is studied with sky and clouds.

Buds and twigs, sprouting seeds. These should be drawn in pencil, in brush and ink, or in pen and ink. Special attention should be given to the arrangement and proper mounting of this material.

Bird life of the locality should be studied thru the use of museum specimens and observations made of the birds as they return in the spring. Considerable illustrative work may be done in connection with this study. The moth and the butterfly are studied and are treated in a conventional manner in design.

SIXTH AND SEVENTH GRADES

FALL TERM

Less time is given to blackboard work and more to water colors and pencil drawing. Clay is omitted except when used for some special study in design. Much of the illustrative work is done in pen and ink. The study of some of the best modern illustrators and their methods of work is taken up at this time. The Japanese art of drawing with the brush is studied. In this study drawings are made of seeds and seed-pods, grasses and vines, insects and animal life. Natural forms of all kinds are also studied and sketched in pencil, crayon, and water colors; the aim is to lead the pupils to work directly and freely with the mediums best suited to the subjects studied.

The landscape is sketched in all of its changes of color, and color values are illustrated in charcoal gray and in sepia, in crayon and pencil. Some outdoor sketching is attempted.

Elementary and applied designs are made. Flat washes of color for decorative purposes are introduced. Plant forms, animals, and insects are used for designing book covers, portfolio-covers, and

for the purpose of note book illustrations. Abstract treatment of animal, insect, and plant life. Use of blocked paper for this purpose. Decorative treatment of the landscape. Study mural art and its decorative qualities. "American Mural Art" as given by Pauline King is an excellent book to study

WINTER TERM

Study of composition in the landscape, making of window sketches, the study of common objects. The materials and mediums to be used in this instruction should be determined by the nature of the subjects to be drawn, as well as by the needs of the pupils. The pencil and crayon point with occasional use of colored crayons and water colors are the most convenient and best mediums for much of this work.

Perspective principles are analyzed and illustrated. Choose large objects of good color and design for this purpose.

Form and color in correct compositions within given areas, the study of light and shade, and the value of background and foreground illustrated.

Historic art as illustrated in architecture and ornament is given with special study in Greek, Roman, and Byzantine art.

The study of pictures is continued.

Illustrated work in geography, history, and science. Making of portfolios, mounting of pictures suitable for picture study and illustration.

The human figure studied. Class poses for action and costume study.

Constructive design and working drawings as applied to work in manual training are drawn in full size and to scale.

SPRING TERM

The work done this term relates somewhat to the season, but the latter is not so closely followed as in the lower grades. Considerable time is given to rapid sketching in pencil and crayon, connecting this especially with the illustrative work. These sketches are later completed in pen and ink and in wash drawings. Color is not used as frequently here as in the lower grades, but some time is given to the study of tone in color and its application in nature and in art.

Spring flowers are drawn and painted. The beauty of line is studied in the plant as a whole and in its parts. The study of design is continued.

Color is translated in wash drawings, in charcoal gray, and sepia, and designs are made for printed fabrics, stained glass, rugs, and wall paper.

The spring landscape is studied and is painted and drawn during its various changes. The landscapes of Corot especially are studied.

The Prang Teachers' Manuals for the sixth and seventh grades are frequently used for reference.

EIGHTH GRADE

FALL TERM

In the early work done in the fall fruits and flowers are sketched in the various mediums. Considerable brush ink work on rice paper and other suitable paper is done. Vines, fruits, flowers, foliage, and grasses are treated in a decorative manner, in areas adapted to the material chosen. Skill in selection of material and adapting it to a purpose is required from the pupils. The study of Japanese brush drawings and Japanese prints is very helpful here.

Pupils in the higher grades begin to understand their own limitations and those of the different mediums. Then they become interested in the adaptation of means to an end. They become interested in line, in tone. Considerable work is now done in flat tones for all kinds of designing purposes. Surface decorations, designs for limited areas, as book covers, magazine covers, and for various other applied purposes. Working in flat tones for posters and general illustrative effects. Tile and carving designs, rug patterns, and rug making studied. Stained glass patterns are made and harmony and beauty in color combinations are studied.

OUTDOOR SKETCHING. Principles in perspective discovered and analyzed. Building and street scenes sketched. The pupils must learn to pick out interesting and picturesque bits of nature. The teacher should aid in making suggestions as to what to look for and how to put the essentials in the sketch, directly and effectively. The greatest problem is to see things simply and to select the most

important parts from a mass of detail. To learn what to omit is a very important part of outdoor sketching. Pupils keep sketch-books, recording from time to time materials which will aid in illustrative work in various other school subjects. The lead pencil is the most convenient medium for all this work. It may be translated into pen and ink work and into wash drawings. Study of trees in various mediums showing the simple treatment of masses of foliage. Pictures by the best landscape painters as well as book and magazine illustrations will aid greatly in this work. The pupils should be taught to observe correctly and in turn to correctly record these impressions. Whatever in nature can be utilized to express an ideal of beauty, that the pupils should lay hold of. Paint the landscape in its various changes in the fall. Make compositions illustrating good space relations and good color values.

WINTER TERM

Sketching from common objects of all kinds, cylindrical, conical, and rectangular. The principles underlying the appearance of objects in all positions discussed and illustrated. This should only be done when pupils, thru correct seeing and doing, have been able to discover many of these conditions in appearance for themselves.

STILL LIFE STUDIES. Simplicity is of the greatest importance both in the arrangement of the objects and in the lighting. Not more than three or four values should be attempted at first. Objects should be selected for their beauty as well as for their form. Pencil and crayon drawings precede pen and ink sketching. Water colors used in flat tones. Study of values both in color and in neutral tone.

Historic ornament and art is continued. The Saracenic art is studied and examples of design are copied. The Romanesque and Gothic art and architecture are also studied. Sketches of buildings and parts of buildings are made as well as detail of ornament. Some of the works of Raphael and Michael Angelo are studied and note book illustrations are made. Proper mounting of pictures is continued.

Constructive design and working drawings are made to scale.

Illuminated letters and ornamental initials are made. Illuminated and hand-printed manuscripts are studied, especially those

relating to Romanesque and Gothic periods. Original designs for letters and stained glass are made; also designs to be applied to textiles, pottery and metal.

Study of the human figure, action, proportions, and expression. Class poses. Costume studies. Pupils led to observe the works and methods of the masters, both in painting and in sculpture. Color and texture treated in light and dark tones. These give desired effects in a figure without the use of light and shade. Study the work of Boutet de Monvel and others. One indispensable need in all illustrative drawing is knowledge of the human figure and how to use it in action. Pupils must be able to use it in action freely.

All illustrative work done in the various subjects should show the influence of instruction in drawing.

SPRING TERM

Pen and pencil sketching for illustrative work continued. Considerable sketching from nature. Bird life studied and sketches made from birds of locality. Spring flowers drawn and painted. Posters made for various school exercises. Written work illustrated and decorated with initial letters. Outdoor and memory sketches made in charcoal, pencil, pen and ink, and water colors. Color as related to its uses in design studied. Program covers made.

The pencil should ever be the readiest means of expression in all drawing and illustrative work. There is no other medium which offers greater opportunity for the development of simplicity in manner, power and directness in treatment, and refinement in expression than drawing with the lead pencil. A well rendered pencil drawing must be simple and direct, its beauty depending upon quality of line and purity and strength of tone.

The study of art as outlined by the different systems in drawing is valuable to the grade teacher only as a guide to art expression. The art of feeling must penetrate into all expression work as literature, science and history; and painting and drawing should be quite as freely used a means of expression as language. A system in drawing which encourages imitation only is not worthy of a place in a school course.

The work as outlined in this course is influenced by the work as planned for the grades in Text books of Art Education, Prang; The Manual Arts for Elementary Schools, Hammock; The Parallel

Course, Hammock; The Applied Arts Drawing Books, Seegmiller; Principles of Design, Batchelder; The Grammar of Ornament, Jones; Ornament and its Application, Day; History of Architecture, Ferguson; History of Art, Goodyear; Schools and Masters of Painting, Radcliffe; Schools and Masters of Sculpture, Radcliffe; How to Study Pictures, Caffin; American Masters of Painting, Caffin; American Masters of Sculpture, Caffin; The History of Modern Painting, Muther; The Enjoyment of Art, Noyes; The Gate of Appreciation, Noyes; Old Masters and New, Cox; Art for Art's Sake, Van Dyke; The Meaning of Pictures, Van Dyke; How to Judge of a Picture, Van Dyke; The Enjoyment of Pictures, Emery; American Mural Painting, King; Lives of the Painters, Vasari; Composition, Dow; Theory and Practice of Teaching Art, Dow; The Principles of Art Education, Muensterberg; Art Education in the Public Schools of the United States, J. P. Haney, Editor.

MANUAL TRAINING

I. INTRODUCTION

Impression and expression are so intimately related that both suffer if one is emphasized without reference to the other. To give a child an opportunity to express himself in material is a very great aid to his thought; and, vice versa, to have him think before he thus tries to express himself, is a great aid to the expression. Too much thinking, and too much doing are equally bad extremes. A thought may be the result of a moment's activity, or it may be the outcome of the activity of a life-time. The doing may take a longer or shorter time than the thinking. In thought we may take a trip to Europe in less time than it takes to tell it, while the actual **doing** requires physical effort of long duration. On the other hand, the thinking out of a collar button superior to any now on the market may take ten years, while the actual making of it may take only ten seconds. But the original thinking which invents **new** things such as the collar button, is comparatively rare, while imitative thinking is common to all the pupils coming under our care. Imitative work requires more time in the doing than in the thinking, and is common in manual training, although thinking always accompanies the doing.

Thus the great end of manual training is education thru **doing guided by thinking**; but there are other important ends as well, among which are (1) The revelation to the pupil of himself, and his capabilities. This enables us to aid in the production of true and helpful citizens by guiding the pupil toward the realization of his purpose in life; and (2) The cultivation of that nature which enables one to appreciate another's views, work, and condition. This tends to democracy — to **oneness** — to an understanding of the other person's situation.

Our work in this subject is flexibly organized so that the difficulties involved come within the pupils' interests, needs, and abilities. The possibilities, limitations, and applications in the use of

raffia, reed, card, yarn, cardboard, clay, sheet-iron, brass, copper and wood, together with the typical and essential processes employed, are emphasized.

The construction and proportion are considered of first importance, typical methods of decoration are dealt with thruout the course as a recognition of the craving among all peoples for some form of ornamentation (even of merely useful articles). Outlining with the veining tool, chip carving, mass coloring, flat and relief carving, inlaying, and applied metal work are used as the occasion allows, and the pupils' ability warrants.

Correlation with other subjects is encouraged, and pupils are allowed to put in extra time upon pieces of independent work chosen as a result of some special interest.

REFERENCES

MAGAZINES

For the Teacher: Manual Training Magazine, School Arts Book, International Studio, Woodcraft.

For Pupils: Popular Mechanics, Popular Electricity, Electrician and Mechanic, Organization Reports; The Council of Supervisors of the Manual Arts, Eastern Art and Manual Training Association, Western Drawing and Manual Training Association, Illinois Manual Arts Association.

BOOKS

*General, (see below).

Cardboard, weaving and basketry—

Handwork Construction — Lina Eppendorff.

Cardboard Construction — J. H. Trybom.

Occupations for Little Fingers — Sage and Cooley.

Industrial Work for Public Schools — Holton and Rollins.

Hand-Loom Weaving — Mattie Phipps Todd.

Primary Handwork — Wilhemina Seegmiller.

Rug Weaving — Cadence Wheeler.

Indian Basketry — James.

Practical and Artistic Basketry — Laura Rollins Tinsley.

The Basket Maker — Luther Weston Turner.

How to Make Baskets — Mary White.

Knotting and Splicing — Paul Hasluck.

Clay work—

Clay Work — Katherine M. Lester.

Modeling in Public Schools — Walter Sargent.

Clay Modeling and Plaster Casting — Paul N. Hasluck.
Potters, Their Arts and Crafts — Sparks and Gandy.
The Story of The Potter — C. F. Binns.
How to Make Pottery — Mary White.
The Appreciation of Sculpture — Russel Sturgis.
American Masters of Sculpture — Charles H. Caffin.
Mythology in Marble — Louie M. Bell.
Michelangelo, Greek Sculpture, and Tuscan Sculpture — E. M. Hurl.

Metal work—

Copper Work — Augustus F. Rose.
The Art Crafts for Beginners — Frank G. Sanford.
Silverwork and Jewelry — H. Wilson.
Venetian Iron Work Designs — Hammacher, Schlemmer & Co.

Woodwork—

Essentials of Woodworking — Ira S. Griffith.
Beginning Woodwork — Clinton S. Van Deusen.
Problems in Woodworking — M. W. Murray.
Problems in Furniture Making — Fred D. Crawshaw.
Sloyd for the Three Upper Grammar Grades — Gustaf Larson.
Practical Wood-Carving — Eleanor Rowe.
Chip-Carving — Gustaf Larson.
Puzzles Old and New — Professor Hoffman.
Handbook of the Trees of the Northern States and Canada — Romeyn B. Hough.
Problems in Mechanical Drawing — Charles A. Bennett.
Mechanical Drawing for Grammar Grades — Edmund Ketchum.

Design—

Handbook of Ornament — F. S. Meyer.
Composition — Arthur W. Dow.
Principles of Design — Ernest A. Batchelder.
Classroom Practice in Design — James P. Haney.
A Handbook of Plant Form — Ernest E. Clark.
Furniture Design and Draughting — A. C. Nye.

General—

Economics of Manual Training — Louis Rouillion.
The Furnishing of a Modest Home — Fred H. Daniels.
The City of Refuge — H. T. Bailey.
The Appreciation of Architecture — Russell Sturgis.

For the Pupils—

Harpers Electricity Book for Boys — J. H. Adams.
The Beard Series of Handicraft Books for Boys and Girls,

The Thos. M. St. John Mechanical and Electrical Books for Boys
Woodworking for Beginners — C. G. Wheeler.
Magical Experiments — Arthur Good.
A Boy's Workshop — Henry R. Waite.
The Child Housekeeper — Colson & Chittenden.
The Young Engineer — Hammond Hall.
The Boy Craftsman — A. N. Hall.

EQUIPMENT AND SUPPLIES

For Wood and Metal—

Chandler & Barber, Boston, Mass.
A. L. Bemis, Worcester, Mass.
Belcher & Loomis Hdw. Co., Providence, R. I.
Hammacher, Schlemmer & Co., New York.
Grand Rapids Hand Screw Co., Grand Rapids, Mich.
Chas. A. Strelinger Co., Detroit, Mich.
Orr & Lockett Hdw. Co., Chicago, Ill.
C. Christiansen, Chicago, Ill.
E. H. Sheldon & Co., Chicago, Ill.
Columbia School Supply Co., Indianapolis, Ind.

For Raffia, Reed, Yarn, etc.—

J. L. Hammett Co., Boston, Mass.
American Rattan & Reed Co., Brooklyn, N. Y.
United States Rattan Co., Hoboken, N. J.
Atkinson, Metzner & Grover, Chicago, Ill.
Thomas Charles Co., Chicago, Ill.
Garden City Educational Co., Chicago, Ill.
Northwestern School Supply Co., Minneapolis, Minn.
Faribeu Loom Co.,

For Statuary and Casts—

P. P. Caproni & Bro., Boston, Mass.
Boston Sculpture Co., Melrose, Mass.
C. Hennecke Co., Milwaukee, Wis.

II. SUBJECT MATTER

No pupil is expected to make all the articles listed for any one group in a given year. The list includes many problems which have been found valuable, and as many are used as the time and the ability of the pupils will permit. This also allows the work to be somewhat different each year, so that unpromoted pupils do not deal the second time with exactly the same thing. It also supplies extra work for those doing more than is found in the regular schedule.

THIRD DIVISION

I. Group Work. A. Dolls' houses and barns, built from cracker boxes. B. Furniture for these.

This work is found very valuable in its social elements. Co-operation is brought about by having the boys make a doll's bed, and letting the girls furnish the bedding for it; or by dividing the class into groups, and illustrating the factory system, by having each group responsible for a particular part of an article. The pupil finds that he must do his work with especial care. Otherwise he spoils the completed work of others as well as his own.

II. Individual Work. A. Wood (requiring shaping in two dimensions, only). 1. Calendar Backs. 2. Match Strikes. 3. Paper knives. 4. Puzzles. B. Bent Iron Work. 1. Picture easels. 2. Mats. 3. Pen racks. 4. Ink stands. 5. Brackets. C. Raffia (for girls). 1. Napkin ring. 2. Small basket. 3. Shopping bag.

FOURTH DIVISION

Toys, puzzles and games form the characteristic feature of this section. Contests in kite flying, archery, and kindred sports, among our own pupils, and with other schools are encouraged; and these contests are found very helpful in arousing enthusiasm and right school and class spirit.

I. Toys. A. Bow and Arrow. B. Bow-gun. C. Flying machine. D. Kite. E. Wind Mill. F. Water motor. G. Telegraph. H. Wondergraph.

II. Puzzles. A. Nail. B. Block. C. String.

III. Games. A. Solitaire board. B. Checker board.

IV. Utility Models. A. Nail and screw boxes. B. Flower pot stand. C. Sled. D. Hygroscope. E. Skis.

V. Reed Basketry and Weaving (for girls). A. Reed Mats. B. Trays. C. Baskets. D. Table Mats. E. Holders. F. Book bag. G. Rugs. (from combinations of mats).

FIFTH DIVISION

I. Articles of use to the pupil in home or school are emphasized here. A. Toolrack. B. Sleeve board. C. Necktie rack. D. Book rack. E. Tabouret. F. Porch Chair. G. Pen tray. H. Ink stand. I. Whisk broom holder. J. Coat and trousers hangers. K. Shoe polishing box. L. Bob sled. M. Plate rack.

II. Extra work of particular interest to certain pupils. A. Telegraph instruments. B. Zyllophone (made by using maple blocks of varying length). C. Turning lathes and scroll saws (made from old sewing machines and run by water motors made in previous grades). D. Model boat, propelled by clock works, and used as basis for contests of distance, speed, maneuvering, and control.

III. Claymodeling and Pottery (for girls). A. Fruits. B. Leaves. C. Animals. D. Conventional forms. E. Low bowls. F. Flower pots. G. Fern dishes.

SIXTH DIVISION

In this grade we do more technical work, involving more difficult processes of construction, and larger projects.

I. Bread or Cutting Boards involving A. The four typical glue joints. 1. Butt. 2. Dowel. 3. Tongue and groove. 4. Spline or feather. B. The four typical modifications of the corners. 1. Straight oblique. 2. Tangent curve. 3. Shoulder curve. 4. Concave.

II. Wooden or Metal Boxes. A. Kind. 1. Handkerchief. 2. Glove. 3. Necktie. 4. Jewelry. B. Decoration. 1. Plain. 2. Inlaid. 3. Carved. 4. Metal.

III. Individual projects varying in scope according to the time and the pupils' efficiency. A. Foot stools and chairs. 1. With woven seats. 2. With upholstered seats. B. Reading lamps. C. Desks. D. Mechanical drawing tables. (Note. Any ordinary article of furniture is possible for the boy who has done satisfactory work thruout the grades).

IV. Pottery (for girls). A. Paper weight. B. Tea tile. C. Tray. D. Soap dishes. E. Vases. F. Jardiniere. (Note. Girls select kind and color of glaze wanted, and with assistance of teacher, grind and apply it. Opportunity for observing the firing is also given).

DOMESTIC ARTS

SEWING

In planning the course in sewing care has been exercised that the useful garments and domestic articles chosen for the application of the essential stitches should not merely be of interest to the pupils in these grades, but also that the work should not require fine coordination of either eye or body muscles.

THIRD DIVISION

I. Thimble and Needle Drills.

II. Canvas Work, illustrative of 1. Basting. 2. Running. 3. Stitching. 4. Overhanding. 5. Overcasting. 6. Blanket stitching. 7. Featherstitching.

III. Application of Stitches. 1. On Christmas presents such as a. Needlebooks. b. Sachet bags. c. Penwipers. d. Bags. e. Towels. 2. On finer work such as outfit for child's bed, consisting of a. Mattress. b. Sheets. c. Blankets. d. Comforter. e. Spread — with ornamental design. f. Pillows. g. Pillow cases. h. Fancy pillow covers. (Note. There is also given in this connection a discussion of bed-clothing, sanitation of beds, making of beds, etc.)

FOURTH DIVISION

I. Review of Stitches used on Bags.

II. New stitches such as those needed for 1. French and felled seams. 2. Putting on bands. 3. Sewing on buttons. 4. Making button holes. (Illustrated by the making of a sewing apron, which is drafted.)

III. Application of all stitches to the making of 1. Christmas presents such as a. Dusters. b. Laundry bags. c. Drawer pads. d. Waist protectors. e. Handkerchiefs. 2. Household articles such as a. Towels. b. Holders. c. Napkins. d. Plain and hemstitched doilies. e. Runners (scalloped).

IV. Mending, including such work as 1. Darning. 2. Patching. 3. Piecing.

V. Drafting and making cooking aprons (to be used next year in cooking class).

COOKING

Cooking is this year (1909-1910) given for the first time to Elementary School pupils—to girls in grades seven, eight, and nine. The course which follows is tentative, being made to fit present conditions, of which the one requiring most consideration is the time limit for the work. For both theory and practice, pupils in the Fifth Division (seventh grade) are allowed two forty-five-minute periods per week, and the Sixth Division pupils three such periods. To permit of some theory, and yet give time at the close of a period for the necessary putting away of all utensils "clean and in order," the actual practice in cooking must each day be upon what can readily be accomplished in the short time. For this reason bread-making, as well as some other long processes, must be omitted.

FIFTH DIVISION

- I. **Fruits:** A. Apple sauce. B. Baked apple. C. Stewed apple (whole). D. Canning. E. Cranberry jelly. F. Fruit cup.
- II. **Starchy Foods:** A. Tapioca. B. Cereals. 1. Cornmeal—mush, plain and fried. 2. Cream of wheat—plain and with dates. 3. White sauce (to show effect of heat on starch). 4. Rice—plain, with cheese, in pudding. 5. Macaroni. C. Vegetables. 1. Potatoes: (a) Boiled, with and without jackets. b. Baked. c. Creamed. d. Au gratin. e. Potato balls. f. Sauted. g. French fried. h. Glazed sweet potatoes. 2. Cabbage: a. Boiled. b. Scalloped. 3. Corn: a. Scalloped. b. Fritters or "oysters."

- III. **Eggs** (taught in season): A. Boiled. B. Poached—on toast. C. Shirred. D. Fried. E. Scrambled. F. Omelet. G. Deviled. H. Creamed, on toast. I. Marguerites. J. Snow pudding. K. Prune whip. L. Lemon souffle.
- IV. **Milk**: A. Junket pudding. B. Cornstarch pudding. C. Custard: 1. Boiled. 2. Baked. 3. Caramel. D. Cream toast. E. Cream soups: 1. Pea. 2. Corn. 3. Tomato. 4. Oyster. F. Croutons (to accompany soups).
- V. **Beverages**: A. Cocoa and chocolate. B. Lemonades and fruit punch. C. Tea and coffee. D. Serving afternoon tea, etc.
- VI. **Salads**: A. With boiled salad dressing: 1. Banana salad. 2. Celery and cabbage salad. 3. Potato salad. B. With Mayonnaise dressing: 1. Waldorf salad. 2. Fruit salad. 3. Porcupine salad. C. Wafers (to serve with salad)—plain, and cheese wafers.
- VII. **Sandwiches**: A. Cheese. B. Egg. C. Meat. D. Pimento. E. Raisin.
- VIII. **Gelatine**: A. Lemon jelly. B. Sparkling lemon jelly. C. Fruit gelatine.
- IX. **Ices and Ice Cream**.

SIXTH DIVISION

- I. **Preservation of foods**:
- II. **Food classification**: A. Carbohydrates: 1. Sugar: Stages in boiling sugar: a. Thread stage—marshmallows. b. Soft ball stage—fondant, pinoche, fudge. c. Hard ball stage—taffy. d. Caramel stage—peanut brittle. e. Stuffed dates (accessory). 2. Starch: a. Coarse oatmeal. b. Fried oatmeal. c. Rice. d. Moulded rice. e. Tapioca. f. Tapioca custard. 3. Cellulose: a. Celery, creamed. b. Carrots, sauted. B. Fats: 1. Making of butter. 2. Bacon—oysters in bacon. 3. Frying in lard and in oil: a. Rice croquettes. b. Salmon croquettes. c. Potato balls. 4. Sauteing: a. Apples. b. Oysters. C. Proteids: 1. Eggs: a. Boiled three ways. b. Omelet. c. Custard. 2. Meats: a. Chops. b. Roast. c. Warmed over meat—minced, on toast; hash, cottage pie. d. Stew—rice border. 3. Cheese: a. Fondue. b. Timbales.

- III. **Breads and Cakes:** A. Batters: 1. Thin batters: a. With air as a leavening agent—cream puffs. b. With baking powder as a leavening agent—griddle cakes. 2. Thick batters: a. With baking powder as a leavener—Muffins, Health food muffins, Sally Lunn, Scones, Cakes and their frostings, Gingerbread, Cottage pudding, Steamed Graham pudding. B. Doughs: 1. Cookies. 2. Doughnuts. 3. Biscuit. 4. Short-cake. 5. Pastry. C. Sponges: 1. Bread. 2. Rolls. 3. Ways of using stale bread: a. French toast. b. Bread pudding. c. Use of crumbs: (1) Scalloped dishes. (2) Bread omelet. (3) Bread griddle cakes. (4) Crumbing—veal croquettes.
- IV. **Miscellaneous:** A. Fireless cooker. B. Invalid cookery: 1. Gruel. 2. Toast water. 3. Egg-nog. 4. Invalid's tray. C. 1. Serving—meal prepared and served by class. 2. Suitable combinations of food. D. Canning. E. Ices and Ice creams.

PENMANSHIP

The really important elements of success in writing are the position of the body, of the arms and hands, of the paper, the manner of holding the pen, and the movement. This applies equally to the vertical and the slant styles of writing.

The important thing in writing is speed and movement, while the direction of the lines and the special style of letters are of secondary importance. It would, indeed, be difficult to decide upon a universal style of writing since it is put to so many different uses.

If correct habits of writing have been established in the school room the necessary transition period from school to office hand, from round to slant, or vice versa, will be of short duration. However, if the boy has been taught merely to make letters, regardless of speed and movement, he will meet with utter failure in any style of writing when he attempts to adapt his hand to the necessities of business life.

To establish and work out broad and well defined principles which may have a lasting influence would seem all important in teaching the art of writing. Therefore we make an effort to impress the following principles underlying correct writing thruout the grades.

I. Position of the body, arms, hands, pen and paper.

- a. Sit directly in front of the desk, feet squarely on the floor.
- b. Allow two-thirds of the forearm to rest upon the desk.
- c. Let the hand rest upon the first joint of the little finger, in a position to move back and forth easily with the forearm.
- d. The pen should be held lightly but firmly with the edge of the thumb upon the holder, the first finger on the holder, allowing the holder to rest upon the root of the nail of the middle finger.
- e. The position of the paper should correspond with the direction of the lines. If vertical writing be employed, place the paper

in front of the writer so that the left edge will be opposite the center line of the body. In the slanting style the paper is turned so that it will correspond with the slant of the letters.

II. Form.

1. VERTICAL WRITING. The circle is the fundamental form in the vertical hand, and the letters are therefore circular in form.

Retrace to make angles and turns in the vertical style. In most styles of writing the lines simply touch in forming an angle, and the result is short angles and turns, and close spacing between lines. The vertical style because of the retracing requires broad turns. Allow wide spacing between letters, words and sentences, and above and below each sentence or line of writing. The capital, loop and stem letters are two spaces high in the vertical hand — all other letters are but one space high — the proportion therefore is as two to one. It must be continually borne in mind that the vertical style is not the slant straightened up — but is a characteristic hand based upon certain well defined principles. It lends itself especially well to all blackboard work in lower grades, and has a practical value in primary work.

2. SLANT WRITING. The oval is the fundamental form in the slant hand. The turns are broader in the modern slant hand than in the early Spencerian style. The former proportion of three to one has been reduced to two to one — the same as in the vertical hand. Also wide spacing is allowed between letters, words and sentences and above and below sentences and lines. A modified slant hand, as given, is taught in all grades.

III. Movement and Speed.

Movement and speed are as fundamental in writing as are rhythm and time in music.

Movement and speed depend largely upon a well regulated course in movement exercises, which should begin with the first lessons in writing, and end when good movement has become a habit. The child can not apply the principles of good movement until he has gained sufficient control of hand, arm, and rhythmic element. This mastery of principles depends upon daily practice of exercises as much in writing as in learning to play the violin. School room and business college results differ largely because of the daily continuous movement drills in the latter, as opposed to

the intermittent lessons which are possible in the school room. For this reason it takes a longer time to see the effect of movement drill in the school room, and the child is continually handicapped because of inability to apply that which he has not yet fully mastered.

The art of learning to write is a growth as are all other arts, and the most effective movement work is possible in the higher grades at a time when the writing lesson usually becomes very irregular. This often retards an ordinary change from school to business handwriting, regardless of style of letters employed.

IV. Rhythmic Movement.

Letters are a result of movement and depend for form, speed and beauty upon a rhythmic, regular and rapid movement. Rhythm is one of the fundamental elements belonging to good movement, and the fine rhythmic sense of the musician must be evident in the writing period else the movement will not be practical.

A rhythmic method of counting for exercises, words and letters is necessary in establishing a regular, rapid movement. Notice the accent in counting with as much care as in a music lesson. As the strong, weak beats alternate in music so the counts should alternate in writing. The down stroke receives the strong beat or count, the up stroke a light beat or count. In counting for the capital O count **one**-two, **one**-two, **one**-two, quitting the two quickly and lightly. If the word "and" be used in counting it should always be spoken lightly and rapidly since it is used only for connecting lines. The voice in counting should be a light staccato — and thru the medium of the voice should be indicated a continuous, elastic movement.

We place much emphasis upon the use of the forearm, and try to secure the free use of both hand and arm.

V. Method of Practice.

With beginners the blackboard is used exclusively for a considerable time. Here we allow the child at first entire freedom to make the form as best he can, but always with the full arm movement. Gradually he is taught to execute definite forms of uniform size. Clear conception of symmetry in simple forms and a good degree of skill in making them should be attained before the child is permitted to use pencil and paper at all.

Upon changing from blackboard to paper we use a broad-pointed pencil, or checking crayon, and unruled manila paper cut to proper size.

With these the blackboard exercises are repeated with only enough modification to maintain the interest and to correspond with the child's better sense of form, proportion and symmetry. We allow him to make very large forms at first, and do not hurry into the early writing of words and sentences. If the blackboard practice has been of the right kind the child will quite naturally use his whole arm when he begins to work with paper. This is continued indefinitely; though gradually control of the finer muscles which move the fingers will be acquired and some degree of finger movement become both natural and promotive of facility and skill.

VI. Order of Lesson.

Good penmanship is the result of good order, a systematic way of doing things, quite as much as the study of form and movement.

1. Signal for attention.
2. Distribute materials according to definite plan.
3. Present copy upon blackboard. Insist upon closest attention during presentation of copy. Erase blackboard carefully for presentation of copies. Arrange copy upon blackboard as you expect class to arrange work. One letter or copy in lower grades is quite sufficient for one lesson. Cultivate the spirit which aims to make perfect letters, or do perfect work.
4. Require concert work in opening inkwells, books and taking pens — let this be done quietly.
5. After the class has tried copy, point out errors upon the blackboard, comparing the correct with the incorrect form.

VII. Writing Books.

Steadman's Graded Lessons in Writing. Use the manuscript Outline in first grade, Book I in second grade, Book II in third grade, and a corresponding succession of numbers for the remaining grades.

VIII. Supplementary Work.

1. A COURSE IN LETTER WRITING. A course in letter writing is given for the sake of emphasizing necessary skill in writing and to impress the need of a practical handwriting.

In this course the regular correspondence paper is used, and both handwriting and the use of good English receive a test not possible in the practice of formal writing book copies.

2. FIGURES. The frequent use of figures in business and the importance of exhibiting clearly correct results in all business transactions makes necessary a special study as to structure, and practice in making rapid figures. We present figures in the same way as letters — calling attention to characteristic features and arrangement.

For convenience sake in adding and subtracting, figures should be written directly under each other. In order to regulate and increase the speed, count as in making the letters. Allowing pupils to see how many figures they can make in a minute is a simple device for promoting speed. An occasional practice upon figures is of great benefit — odd moments during the day can be profitably used in practicing upon a figure — or group of figures.

3. DAILY WRITTEN WORK. There should be a minimum of written work — especially of copied work — and a maximum of well directed effort in all written exercises. The writing lesson and daily work should be so related that the child gains power every time he writes, and with a reasonable amount of written work much can be accomplished.

We place a model lesson upon the blackboard for the sake of illustrating the general arrangement of the work. Twice during each term a selection consisting of not more than six lines is written by the pupils upon paper, especially designed for this purpose. This work is corrected — only general points being pointed out at first. Shape, size, direction of lines, spacing, quality of lines are considered — and with the disappearance of some of the more conspicuous faults the writing begins to improve. This work is made the basis for comparison in all other written work.

Punctuality and system in conducting the writing lesson, and a sympathetic interest in every effort made by the pupil will go far towards awakening ambition and earnest effort on the part of the class in writing.

SPELLING

I. INTRODUCTION

To counteract a general tendency toward inaccuracy in spelling we resort to two things, 1. A certain amount of drill in more or less formal spelling lessons, and 2. The cultivation of a sensitive spelling conscience. The close relation which should exist between the formal spelling lesson and the child's written vocabulary lays the basis for the ideal method of securing words for the spelling lesson which is to select them from the actual mistakes in the written work of the class. This gives words of which the children know the meaning and which, being in their own written vocabulary, need to be spelled and, being misspelled, to be drilled upon.

However, in the higher grades there seems to be a limit to the value in calling children's attention to misspelled words in regularly recurring spelling lessons. At this period the necessity of showing them how to spell the word is largely gone and in place of it more attention must be paid to having them write by habit words which they can usually spell when their attention is called to them but which they leave in a slovenly condition when they are intent upon expressing their ideas. If the child by this time has not gained a sensitive spelling conscience he is hardly likely to get it in a formal spelling lesson.

This sensitiveness should be sought in the early grades soon after the child begins to write. If five or six years later he still has poorly defined ideas of word-forms it means that too many words have been introduced in too short a time and consequently the child has been able to build up for himself no standard of correctness, no list of words of which he is absolutely sure and to which he can make additions of other correct forms as he learns them. His spelling power is disorganized and lacking in tone.

The most natural place and likewise the most satisfactory in which this sensitiveness may be acquired is in the regular everyday written work in lessons in geography, history, and arithmetic; and the most satisfactory method we have found is first and always to

impress upon the children the necessity of always spelling well and second to have them read over again anything they have written, for the sake of the form. They are expected, whenever in doubt about a word, to consult the teacher or the dictionary. When there are inexcusable mistakes in the work handed in, the misspelled words must be looked up and written out.

II. SUBJECT MATTER

FIRST DIVISION

FIRST GRADE. What little is learned of spelling in the first grade is gained in connection with the reading and writing lessons, thru copying and from memory. The child learns to sign his name, to write labels, action commands, and the briefest of letters.

SECOND GRADE. In the second grade, in connection with the study of phonics, attention is directed to the individual letters forming a word. The words, however, are learned chiefly thru the writing of daily weather reports, and frequent letters, which are corrected by the teacher. During the writing of these exercises the child leaves blank spaces for words which he can not spell. These spaces are filled by the teacher and when the pupil again receives his book, he copies the new words into a properly arranged blank-book called his "dictionary." In doing later work he refers to this "dictionary" when doubt arises in his mind concerning the spelling of a word contained in it.

SECOND DIVISION

In this division the main work in spelling grows out of the children's needs, especially in written language, so that it can not be definitely stated. To overbalance this indefiniteness, and because the text used is particularly helpful on many of the words most needed, about twelve minutes per day are given to text book work as follows:

B THIRD CLASS. Rational Speller, No. I, Rice, First Year, completed.

A THIRD CLASS. Rational Speller, No. I, Rice, Second Year, completed.

B FOURTH CLASS. Rational Speller, No. I, Rice, Third Year, completed.

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